<210> 11943
<211> 527
<212> PRT
<213> Homo sapiens

<400> 11943

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Tyr Asn Ala Gly Val Lys His Tyr Glu Ala Asp Asp Phe Glu Met Ala
         35                  40                  45
Ile Arg His Phe Glu Gln Ala Leu Arg Glu Tyr Phe Val Glu Asp Thr
     50                  55                  60
Glu Cys Arg Thr Leu Cys Glu Gly Pro Gln Arg Phe Glu Glu Tyr Glu
 65                  70                  75                  80
Tyr Leu Gly Tyr Lys Ala Gly Leu Tyr Glu Ala Ile Ala Asp His Tyr
                 85                  90                  95
Met Gln Val Leu Val Cys Gln His Glu Cys Val Arg Glu Leu Ala Thr
            100                 105                 110
Arg Pro Gly Arg Leu Ser Pro Ile Glu Asn Phe Leu Pro Leu His Tyr
        115                 120                 125
Asp Tyr Leu Gln Phe Ala Tyr Tyr Arg Val Gly Glu Tyr Val Lys Ala
    130                 135                 140
Leu Glu Cys Ala Lys Ala Tyr Leu Leu Cys His Pro Asp Asp Glu Asp
145                 150                 155                 160
Val Leu Asp Asn Val Asp Tyr Tyr Glu Ser Leu Leu Asp Asp Ser Ile
                165                 170                 175
Asp Pro Ala Ser Ile Glu Ala Arg Glu Asp Leu Thr Met Phe Val Lys
            180                 185                 190
Arg His Lys Leu Glu Ser Glu Leu Ile Lys Ser Ala Ala Glu Gly Leu
        195                 200                 205
Gly Phe Ser Tyr Thr Glu Pro Asn Tyr Trp Ile Arg Tyr Gly Gly Arg
    210                 215                 220
Gln Asp Glu Asn Arg Val Pro Ser Gly Val Asn Val Glu Gly Ala Glu
225                 230                 235                 240
Val His Gly Phe Ser Met Gly Lys Lys Leu Ser Pro Lys Ile Asp Arg
                245                 250                 255
Asp Leu Arg Glu Gly Gly Pro Leu Leu Tyr Glu Asn Ile Thr Phe Val
            260                 265                 270
Tyr Asn Ser Glu Gln Leu Asn Gly Thr Gln Arg Val Leu Leu Asp Asn
        275                 280                 285
Val Leu Ser Glu Glu Gln Cys Arg Glu Leu His Ser Val Ala Ser Gly
    290                 295                 300
Ile Met Leu Val Gly Asp Gly Tyr Arg Gly Lys Thr Ser Pro His Thr
305                 310                 315                 320
Pro Asn Glu Lys Phe Glu Gly Ala Thr Val Leu Lys Ala Leu Lys Ser
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09509169.030502

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                325                 330                 335
Gly Tyr Glu Gly Arg Val Pro Leu Lys Ser Ala Arg Leu Phe Tyr Asp
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Ile Ser Glu Lys Ala Arg Arg Ile Val Glu Ser Tyr Phe Met Leu Asn
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Ser Thr Leu Tyr Phe Ser Tyr Thr His Met Val Cys Arg Thr Ala Leu
    370                 375                 380
Ser Gly Gln Gln Asp Arg Arg Asn Asp Leu Ser His Pro Ile His Ala
385                 390                 395                 400
Asp Asn Cys Leu Leu Asp Pro Glu Ala Asn Glu Cys Trp Lys Glu Pro
                405                 410                 415
Pro Ala Tyr Thr Phe Arg Asp Tyr Ser Ala Leu Leu Tyr Met Asn Asp
            420                 425                 430
Asp Phe Glu Gly Gly Glu Phe Ile Phe Thr Glu Met Asp Ala Lys Thr
        435                 440                 445
Val Thr Ala Ser Ile Lys Pro Lys Cys Gly Arg Met Ile Ser Phe Ser
    450                 455                 460
Ser Gly Gly Glu Asn Pro His Gly Val Lys Ala Val Thr Lys Gly Lys
465                 470                 475                 480
Arg Cys Ala Val Ala Leu Trp Phe Thr Leu Asp Pro Leu Tyr Arg Glu
                485                 490                 495
Leu Glu Arg Ile Gln Ala Asp Glu Val Ile Ala Ile Leu Asp Gln Glu
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Gln Gln Gly Lys His Glu Leu Asn Ile Asn Pro Lys Asp Glu Leu
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<210> 11944
<211> 3558
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (202)..(1728)

<400> 11944

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ccgagcgagc gagcggcgcc cagcccagcg cctcggccga acccctccgc agcaggctgc 180
ctgctgtttc ccggggagat catgaaacga ggtcgccttc ccagcagcag tgaggattct 240
gacgacaatg gcagcctgtc aactacttgg tcccagaatt cccgatccca gcataggaga 300
agctcctgct ccagacatga agatcgaaag ccttcagagg tgtttaggac agacctgatc 360
actgccatga agttgcatga ctcctaccag ctgaatccgg atgagtacta tgtgttggca 420
gatccctgga gacaggaatg ggagaaaggg gtccaggtgc ctgtgagccc ggggaccatc 480
cctcagcctg tggccagggt tgtgtctgaa gagaaatccc tcatgttcat caggcccaag 540
aagtacatcg tgtcatcagg ctctgagcct cccgagttgg gctatgtgga catccggacg 600
ctggctgaca gcgtgtgtcg ctatgacctc aatgacatgg atgctgcatg gctggaactg 660
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09/15/2005 10:04 [0000]

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<210> 11945
<211> 509
<212> PRT
<213> Homo sapiens

<400> 11945

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Arg Ser Ser Cys Ser Arg His Glu Asp Arg Lys Pro Ser Glu Val Phe
        35                  40                  45
Arg Thr Asp Leu Ile Thr Ala Met Lys Leu His Asp Ser Tyr Gln Leu
    50                  55                  60
Asn Pro Asp Glu Tyr Tyr Val Leu Ala Asp Pro Trp Arg Gln Glu Trp
65                  70                  75                  80
Glu Lys Gly Val Gln Val Pro Val Ser Pro Gly Thr Ile Pro Gln Pro
                85                  90                  95
Val Ala Arg Val Val Ser Glu Glu Lys Ser Leu Met Phe Ile Arg Pro
            100                 105                 110
Lys Lys Tyr Ile Val Ser Ser Gly Ser Glu Pro Pro Glu Leu Gly Tyr
        115                 120                 125
Val Asp Ile Arg Thr Leu Ala Asp Ser Val Cys Arg Tyr Asp Leu Asn
    130                 135                 140
Asp Met Asp Ala Ala Trp Leu Glu Leu Thr Asn Glu Glu Phe Lys Glu
145                 150                 155                 160
Met Gly Met Pro Glu Leu Asp Glu Tyr Thr Met Glu Arg Val Leu Glu
                165                 170                 175
Glu Phe Glu Gln Arg Cys Tyr Asp Asn Met Asn His Ala Ile Glu Thr
            180                 185                 190
Glu Glu Gly Leu Gly Ile Glu Tyr Asp Glu Asp Val Val Cys Asp Val
        195                 200                 205
Cys Gln Ser Pro Asp Gly Glu Asp Gly Asn Glu Met Val Phe Cys Asp
    210                 215                 220
Lys Cys Asn Ile Cys Val His Gln Ala Cys Tyr Gly Ile Leu Lys Val
225                 230                 235                 240
Pro Glu Gly Ser Trp Leu Cys Arg Thr Cys Ala Leu Gly Val Gln Pro
                245                 250                 255
Lys Cys Leu Leu Cys Pro Lys Lys Gly Gly Ala Met Lys Pro Thr Arg
            260                 265                 270
Ser Gly Thr Lys Trp Val His Val Ser Cys Ala Leu Trp Ile Pro Glu
        275                 280                 285
Val Ser Ile Gly Ser Pro Glu Lys Met Glu Pro Ile Thr Lys Val Ser
    290                 295                 300
His Ile Pro Ser Ser Arg Trp Ala Leu Val Cys Ser Leu Cys Asn Glu
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305                 310                 315                 320
Lys Phe Gly Ala Ser Ile Gln Cys Ser Val Lys Asn Cys Arg Thr Ala
                325                 330                 335
Phe His Val Thr Cys Ala Phe Asp Arg Gly Leu Glu Met Lys Thr Ile
            340                 345                 350
Leu Ala Glu Asn Asp Glu Val Lys Phe Lys Ser Tyr Cys Pro Lys His
        355                 360                 365
Ser Ser His Arg Lys Pro Glu Glu Ser Leu Gly Lys Gly Ala Ala Gln
    370                 375                 380
Glu Asn Gly Ala Pro Glu Cys Ser Pro Arg Asn Pro Leu Glu Pro Phe
385                 390                 395                 400
Ala Ser Leu Glu Gln Asn Arg Glu Glu Ala His Arg Val Ser Val Arg
                405                 410                 415
Lys Gln Lys Leu Gln Gln Leu Glu Asp Glu Phe Tyr Thr Phe Val Asn
            420                 425                 430
Leu Leu Asp Val Ala Arg Ala Leu Arg Leu Pro Glu Glu Val Val Asp
        435                 440                 445
Phe Leu Tyr Gln Tyr Trp Lys Leu Lys Arg Lys Val Asn Phe Asn Lys
    450                 455                 460
Pro Leu Ile Thr Pro Lys Lys Asp Glu Glu Asp Asn Leu Ala Lys Arg
465                 470                 475                 480
Glu Gln Asp Val Leu Phe Arg Arg Leu Gln Leu Phe Thr His Leu Arg
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Gln Asp Leu Glu Arg Val Met Ile Asp Thr Asp Thr Leu
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<210> 11946
<211> 3268
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (17)..(3268)

<400> 11946
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gggacagaac aaagaaccag ccaagaag 3268

<210> 11947
<211> 1084

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<212> PRT
<213> Homo sapiens

<400> 11947

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Pro Leu Val Tyr Gln Leu Leu Val Leu Ser Ser Lys Gly Ser Arg Lys
         35                  40                  45
Ser Val Leu Glu Gly Ile Ile Ala Phe Phe Ser Ala Leu Asp Lys Gln
     50                  55                  60
His Asn Glu Glu Gln Ser Gly Asp Glu Leu Leu Asp Val Val Thr Val
 65                  70                  75                  80
Pro Ser Gly Glu Leu Arg His Val Glu Gly Thr Ile Ile Leu His Ile
                 85                  90                  95
Val Phe Ala Ile Lys Leu Asp Tyr Glu Leu Gly Arg Glu Leu Val Lys
            100                 105                 110
His Leu Lys Val Gly Gln Gln Gly Asp Ser Asn Asn Asn Leu Ser Pro
        115                 120                 125
Phe Ser Ile Ala Leu Leu Leu Ser Val Thr Arg Ile Gln Arg Phe Gln
    130                 135                 140
Asp Gln Val Leu Asp Leu Leu Lys Thr Ser Val Val Lys Ser Phe Lys
145                 150                 155                 160
Asp Leu Gln Leu Leu Gln Gly Ser Lys Phe Leu Gln Asn Leu Val Pro
                165                 170                 175
His Arg Ser Tyr Val Ser Thr Met Ile Leu Glu Val Val Lys Asn Ser
            180                 185                 190
Val His Ser Trp Asp His Val Thr Gln Gly Leu Val Glu Leu Gly Phe
        195                 200                 205
Ile Leu Met Asp Ser Tyr Gly Pro Lys Lys Val Leu Asp Gly Lys Thr
    210                 215                 220
Ile Glu Thr Ser Pro Ser Leu Ser Arg Met Pro Asn Gln His Ala Cys
225                 230                 235                 240
Lys Leu Gly Ala Asn Ile Leu Leu Glu Thr Phe Lys Ile His Glu Met
                245                 250                 255
Ile Arg Gln Glu Ile Leu Glu Gln Val Leu Asn Arg Val Val Thr Arg
            260                 265                 270
Ala Ser Ser Pro Ile Ser His Phe Leu Asp Leu Leu Ser Asn Ile Val
        275                 280                 285
Met Tyr Ala Pro Leu Val Leu Gln Ser Cys Ser Ser Lys Val Thr Glu
    290                 295                 300
Ala Phe Asp Tyr Leu Ser Phe Leu Pro Leu Gln Thr Val Gln Arg Leu
305                 310                 315                 320
Leu Lys Ala Val Gln Pro Leu Leu Lys Val Ser Met Ser Met Arg Asp
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Cys Leu Ile Leu Val Leu Arg Lys Ala Met Phe Ala Asn Gln Leu Asp
            340                 345                 350
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Val Ser Gln Val His Val Asp Val His Ser His Tyr Asn Ser Val Ala
385                 390                 395                 400
Asn Glu Thr Phe Cys Leu Glu Ile Met Asp Ser Leu Arg Arg Cys Leu
                405                 410                 415
Ser Gln Gln Ala Asp Val Arg Leu Thr Leu Tyr Glu Gly Phe Tyr Asp
            420                 425                 430
Val Leu Arg Arg Asn Ser Gln Leu Ala Asn Ser Val Met Gln Thr Leu
        435                 440                 445
Leu Ser Gln Leu Lys Gln Phe Tyr Glu Pro Lys Pro Asp Leu Leu Pro
    450                 455                 460
Pro Leu Lys Leu Glu Ala Cys Ile Leu Thr Gln Gly Asp Lys Ile Ser
465                 470                 475                 480
Leu Gln Glu Pro Leu Asp Tyr Leu Leu Cys Cys Ile Gln His Cys Leu
                485                 490                 495
Ala Trp Tyr Lys Asn Thr Val Ile Pro Leu Gln Gln Gly Glu Glu Glu
            500                 505                 510
Glu Glu Glu Glu Glu Ala Phe Tyr Glu Asp Leu Asp Asp Ile Leu Glu
        515                 520                 525
Ser Ile Thr Asn Arg Met Ile Lys Ser Glu Leu Glu Asp Phe Glu Leu
    530                 535                 540
Asp Lys Ser Ala Asp Phe Ser Gln Ser Thr Ser Ile Gly Ile Lys Asn
545                 550                 555                 560
Asn Ile Ser Ala Phe Leu Val Met Gly Val Cys Glu Val Leu Ile Glu
                565                 570                 575
Tyr Asn Phe Ser Ile Ser Ser Phe Ser Lys Asn Arg Phe Glu Asp Ile
            580                 585                 590
Leu Ser Leu Phe Met Cys Tyr Lys Lys Leu Ser Asp Ile Leu Asn Glu
        595                 600                 605
Lys Ala Gly Lys Ala Lys Thr Lys Met Ala Asn Lys Thr Ser Asp Ser
    610                 615                 620
Leu Leu Ser Met Lys Phe Val Ser Ser Leu Leu Thr Ala Leu Phe Arg
625                 630                 635                 640
Val Leu Leu Trp Arg Tyr Thr Ser Ile Pro Thr Ser Val Glu Glu Ser
                645                 650                 655
Gly Lys Lys Glu Lys Gly Lys Ser Ile Ser Leu Leu Cys Leu Glu Gly
            660                 665                 670
Leu Gln Lys Ile Phe Ser Ala Val Gln Gln Phe Tyr Gln Pro Lys Ile
        675                 680                 685
Gln Gln Phe Leu Arg Ala Leu Asp Val Thr Asp Lys Glu Gly Glu Glu
    690                 695                 700
Arg Glu Asp Ala Asp Val Ser Val Thr Gln Arg Thr Ala Phe Gln Ile
705                 710                 715                 720
Arg Gln Phe Gln Arg Ser Leu Leu Asn Leu Leu Ser Ser Gln Glu Glu
                725                 730                 735
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Leu Ser Lys Leu Leu Glu Pro Ser Ser Pro Gln Phe Val Gln Met Leu
        755                 760                 765
Ser Trp Thr Ser Lys Ile Cys Lys Glu Asn Ser Arg Glu Asp Ala Leu
    770                 775                 780
Phe Cys Lys Ser Leu Met Asn Leu Leu Phe Ser Leu His Val Ser Tyr
785                 790                 795                 800
Lys Ser Pro Val Ile Leu Leu Arg Asp Leu Ser Gln Asp Ile His Gly
                805                 810                 815
His Leu Gly Asp Ile Asp Gln Asp Val Glu Val Glu Lys Thr Asn His
            820                 825                 830
Phe Ala Ile Val Asn Leu Arg Thr Ala Ala Pro Thr Val Cys Leu Leu
        835                 840                 845
Val Leu Ser Gln Ala Glu Lys Val Leu Glu Glu Val Asp Trp Leu Ile
    850                 855                 860
Thr Lys Leu Lys Gly Gln Val Ser Gln Glu Thr Leu Ser Glu Ala Ser
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<212> DNA
<213> Homo sapiens

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35 40 45
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50 55 60
Gln Val Gly Gly Arg Tyr Leu Cys Ile Ser Leu Ala Gln Ala His Ile

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Val Pro Gly Ser Ala Leu Gln Ile Phe Glu Leu Cys Ala Gln Glu Gln
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Arg Lys Pro Val Arg Leu Glu Ser Ala Glu Arg Leu Ala Glu Ala Val
145                 150                 155                 160
Gln Glu Arg Gln Gln Tyr Ala Trp Leu Cys Ser Gln Leu Arg Arg Lys
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Ala Arg Leu Gly Ser Val Ser Leu Asp Leu Cys Asp Gly Asp Thr Gly
            180                 185                 190
Glu Pro Arg Tyr Thr Leu His Val Val Asp Ser Pro Thr Val Lys Pro
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Ser Arg Asp Asn His Phe Ala Ile Phe Ile Ile Pro Gln Gly Arg Glu
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Thr Glu Trp Leu Phe Gly Met Asp Glu Gly Arg Lys Gln Leu Ala Ala
225                 230                 235                 240
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Gln Tyr Glu Ser Met Asp His Ile Gln Ala Glu Leu Ser Ala Arg Val
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Met Glu Leu Ala Pro Ala Gly Met Pro Thr Gln Gln Gln Val Pro Phe
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Leu Ser Val Gly Gly Asp Ile Gly Val Arg Thr Val Gln His Gln Asp
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Cys Ser Pro Leu Ser Gly Asp Tyr Val Ile Glu Asp Val Gln Gly Asp
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Asp Lys Arg Tyr Phe Arg Arg Leu Ile Phe Leu Ser Asn Arg Asn Val
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Val Gln Ser Glu Ala Arg Leu Leu Lys Asp Val Ser His Lys Ala Gln
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Lys Lys Arg Lys Lys Asp Arg Lys Lys Gln Arg Pro Ala Asp Ala Glu
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Asp Leu Pro Ala Ala Pro Gly Gln Ser Ile Asp Lys Ser Tyr Leu Cys
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Pro Glu Leu Leu Leu Glu Ile Pro Leu Ala Leu Leu Val Val Gly Leu
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Gly Gly Gly Ser Leu Pro Leu Phe Val His Asp Gln Phe Pro Lys Ser
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Leu Gly Met Ser Cys Pro Pro Pro Ala Phe Val Glu Gln Ser Phe Leu
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Gln Lys Val Lys Ser Ile Leu Thr Pro Glu Gly Val Phe Ile Leu Asn
        515                 520                 525
Leu Val Cys Arg Asp Leu Gly Leu Lys Asp Ser Val Leu Ala Gly Leu
    530                 535                 540
Lys Ala Val Phe Pro Leu Leu Tyr Val Arg Arg Ile Glu Gly Glu Val
545                 550                 555                 560
Asn Glu Ile Leu Phe Cys Gln Leu His Pro Glu Gln Lys Leu Ala Thr
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Pro Glu Leu Leu Glu Thr Ala Gln Ala Leu Glu Arg Thr Leu Arg Lys
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Pro Gly Arg Gly Trp Asp Asp Thr Tyr Val Leu Ser Asp Met Leu Lys
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<213> Homo sapiens

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Arg Gly Ala Trp Val Pro Ala Gly Ser Arg Glu Leu Val Ala His His
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                85                  90                  95
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        115                 120                 125
Lys Asp Ser Pro Ala Gly Arg Gly Leu Ser Lys Ala Ala Val Ser Glu
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Glu Leu Lys Trp Trp His Glu Arg Ala Arg Leu Arg Ser Thr Arg Pro
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His Ser Leu Asp Arg Gln Gly Ala Phe Arg Val Arg Ser Leu Pro Leu
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Gly Arg Glu Gly Phe Gly Arg Ala Leu Gly Pro Arg Ala Gln Val Pro
            180                 185                 190
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<212> DNA
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<400> 11953

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Lys Gln Phe Pro Glu Asp Gly Ser Val Cys Thr Leu Pro Thr Glu Glu

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Glu Cys His Thr Ile Pro Cys Leu Leu Ser Pro Trp Ser Glu Trp Ser
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Asp Cys Ser Val Thr Cys Gly Lys Gly Met Arg Thr Arg Gln Arg Met
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Leu Lys Ser Leu Ala Glu Leu Gly Asp Cys Asn Glu Asp Leu Glu Gln
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Val Glu Lys Cys Met Leu Pro Glu Cys Pro Ile Asp Cys Glu Leu Thr
        195                 200                 205
Glu Trp Ser Gln Trp Ser Glu Cys Asn Lys Ser Cys Gly Lys Gly His
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Val Ile Arg Thr Arg Met Ile Gln Met Glu Pro Gln Phe Gly Gly Ala
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Pro Cys Pro Glu Thr Val Gln Arg Lys Lys Cys Arg Ile Arg Lys Cys
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Leu Arg Asn Pro Ser Ile Gln Lys Leu Arg Trp Arg Asp Ala Arg Glu
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Ser Arg Arg Ser Glu Gln Leu Lys Glu Glu Ser Glu Gly Glu Gln Phe
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Pro Gly Cys Arg Met Arg Pro Trp Thr Ala Trp Ser Glu Cys Thr Lys
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<213> Homo sapiens

<400> 11956

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Asp Glu Asn Ser Val Asp Ile Ser Met Leu Lys Thr Gly Ser Ser Leu
     50                  55                  60
Leu Lys Glu Glu Glu Glu Asp Gly Gln Glu Gly Ser Ile His Asn Leu
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Pro Leu Val Thr Ser Gln Arg Pro Phe Tyr Asp Gly Pro Met Pro Thr
                 85                  90                  95
Pro Arg Gln Lys Pro Phe Gln Ser Gly Ser Thr Pro Leu His Leu Thr
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His Arg Phe Met Val Trp Asn Ser Ile Gly Ile Ile Arg Cys Tyr Asn
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Asp Glu Gln Asp Asn Ala Ile Asp Val Glu Phe His Asp Thr Ser Ile
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Ala Ser Lys Leu His Cys Leu His Phe Ser Ser Trp Asp Ser Ser Lys
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His Arg Gly Thr Gly Phe Asp Gly Asp Gln Cys Leu Gly Val Gln Leu
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Leu Glu Leu Gly Lys Lys Lys Lys Gln Ile Leu His Gly Asp Pro Leu
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Pro Leu Thr Arg Lys Ser Tyr Leu Ala Trp Ile Gly Phe Ser Ala Glu
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Gln Ala Ser Ala Ala Ser Tyr Phe Gln Lys Arg Asn Ser Gln Thr Asn
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Thr Pro Ala Ile Cys Pro Pro Gln Asn Thr Glu Asn Gln Arg Pro Lys
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Thr Gly Phe Gln Met Trp Leu Glu Glu Asn Arg Ser Asn Ile Leu Ser
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Ala Lys Lys Asn Leu Asn Leu Ser Lys Lys Gln Lys Pro Leu Asp Phe
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<212> DNA
<213> Homo sapiens

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<222> (197)..(1675)

<400> 11957

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<212> PRT
<213> Homo sapiens

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35 40 45
Gly Gly Leu Lys Lys Asp Ala Thr Asp Phe Glu Trp Ser Phe Trp Met

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Leu Met Leu Tyr Gly Met Trp Ala Cys Trp Cys Val Leu Gly Thr Pro
            100                 105                 110
Gly Val Ala Met Val Leu Leu His Thr Thr Ile Ser Phe Cys Val Ala
        115                 120                 125
Gln Phe Arg Ser Gln Leu Leu Thr Trp Leu Cys Ser Leu Leu Leu Leu
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Ser Thr Leu Arg Leu Gln Gly Val Glu Glu Val Lys Arg Arg Trp Tyr
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Phe Tyr Tyr Pro Val Leu His Asn Gly Pro Ile Leu Ser Phe Ser Glu
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Phe Ile Lys Gln Met Gln Gln Gln Glu His Asp Ser Leu Lys Ala Ser
225                 230                 235                 240
Leu Cys Val Leu Ala Leu Gly Leu Gly Arg Leu Leu Cys Trp Trp Trp
                245                 250                 255
Leu Ala Glu Leu Met Ala His Leu Met Tyr Met His Ala Ile Tyr Ser
            260                 265                 270
Ser Ile Pro Leu Leu Glu Thr Val Ser Cys Trp Thr Leu Gly Gly Leu
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Ala Leu Ala Gln Val Leu Phe Phe Tyr Val Lys Tyr Leu Val Leu Phe
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Leu Pro Arg Cys Val Ser Thr Met Phe Ser Phe Thr Gly Met Trp Arg
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Tyr Phe Asp Val Gly Leu His Asn Phe Leu Ile Arg Tyr Val Tyr Ile
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Pro Val Gly Gly Ser Gln His Gly Leu Leu Gly Thr Leu Phe Ser Thr
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Ala Met Thr Phe Ala Phe Val Ser Tyr Trp His Gly Gly Tyr Asp Tyr
    370                 375                 380
Leu Trp Cys Trp Ala Ala Leu Asn Trp Leu Gly Val Thr Val Glu Asn
385                 390                 395                 400
Gly Val Arg Arg Leu Val Glu Thr Pro Cys Ile Gln Asp Ser Leu Ala
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Arg Tyr Phe Ser Pro Gln Ala Arg Arg Arg Phe His Ala Ala Leu Ala
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Ser Cys Ser Thr Ser Met Leu Ile Leu Ser Asn Leu Val Phe Leu Gly
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Gly Asp Glu Val Gly Lys Thr Tyr Trp Asn Arg Ile Phe Ile Gln Gly
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Trp Pro Trp Val Thr Leu Ser Val Leu Gly Phe Leu Tyr Cys Tyr Ser
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<212> DNA
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<220>
<221> CDS
<222> (140)..(2029)

<400> 11959

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<211> 630
<212> PRT
<213> Homo sapiens

<400> 11960
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20 25 30
Ser Asn Ala Lys Ala Asn Ser His Tyr Leu Tyr Arg His Lys Tyr Glu
35 40 45
Asn Tyr Arg Met Ile Lys Lys Ser Gly Glu Ser Tyr Pro Val His Phe
50 55 60
Lys Lys Glu Glu Ala Ser Ser Leu Asn Ser Leu His Leu Phe Ser Ser
65 70 75 80

Ser Ser Asn Ser His Asn Asn Phe Ile Ser Asp Pro His Lys Pro Asp
85 90 95
Ala Lys Arg Pro Glu Ser Phe Lys Asp His Arg Arg Val Ala Val Lys
100 105 110
Arg Val Ile Lys Glu Ser Lys Lys Glu Ser Ser Val Gly Gly Glu Asp
115 120 125
Leu Asp Ser Tyr Pro Asp Phe Leu His Lys Met Thr Val Val Val Leu
130 135 140
Gln Lys Leu Asn Ser Ala Glu Lys Lys Asp Ser Tyr Glu Thr Glu Asp
145 150 155 160
Glu Ser Ser Trp Asp Asn Val Glu Leu Gly Asp Tyr Thr Thr Gln Ala
165 170 175
Ile Glu Asp Glu Thr Tyr Ser Asp Ile Asn Gln Glu His Val Asn Leu
180 185 190
Phe Pro Leu Phe Lys Ser Lys Val Glu Gly Gln Glu Pro Gly Glu Asn
195 200 205
Ala Thr Leu Ser Tyr Asp Gln Asn Asp Gly Phe Tyr Phe Glu Tyr Tyr
210 215 220
Glu Asp Thr Gly Ser Asn Asn Phe Leu His Glu Ile His Asp Pro Gln
225 230 235 240
His Leu Glu Thr Ala Asp Ala Ser Leu Ser Lys His Ser Ser Val Phe
245 250 255
His Trp Thr Asp Leu Ser Leu Glu Lys Lys Ser Cys Pro Tyr Cys Pro
260 265 270
Ala Thr Phe Glu Thr Gly Val Gly Leu Ser Asn His Val Arg Gly His
275 280 285
Leu His Arg Ala Gly Leu Ser Tyr Glu Ala Arg His Val Val Ser Pro
290 295 300
Glu Gln Ile Ala Thr Ser Asp Lys Met Gln His Phe Lys Arg Thr Gly
305 310 315 320
Thr Gly Thr Pro Val Lys Arg Val Arg Lys Ala Ile Glu Lys Ser Glu
325 330 335
Thr Thr Ser Glu His Thr Cys Gln Leu Cys Gly Gly Trp Phe Asp Thr
340 345 350
Lys Ile Gly Leu Ser Asn His Val Arg Gly His Leu Lys Arg Leu Gly
355 360 365
Lys Thr Lys Trp Asp Ala His Lys Ser Pro Ile Cys Val Leu Asn Glu
370 375 380
Met Met Gln Asn Glu Glu Lys Tyr Glu Lys Ile Leu Lys Ala Leu Asn
385 390 395 400
Ser Arg Arg Ile Ile Pro Arg Pro Phe Val Ala Gln Lys Leu Ala Ser
405 410 415
Ser Asp Asp Phe Ile Ser Gln Asn Val Ile Pro Leu Glu Ala Tyr Arg
420 425 430
Asn Gly Leu Lys Thr Glu Ala Leu Ser Val Ser Ala Ser Glu Glu Glu
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Gly Leu Asn Phe Leu Asn Glu Tyr Asp Glu Thr Lys Pro Glu Leu Pro
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Lys Arg Met Gly Glu Glu Arg Asn Ser Ala Ile Ser Pro Gln Lys Ile
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His Asn Gln Thr Ala Arg Lys Arg Phe Val Gln Lys Cys Val Leu Pro
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Leu Asn Glu Asp Ser Pro Leu Met Tyr Gln Pro Gln Lys Met Asp Leu
        515                 520                 525
Thr Met His Ser Ala Leu Asp Cys Lys Gln Lys Lys Ser Arg Ser Arg
    530                 535                 540
Ser Gly Ser Lys Lys Lys Met Leu Thr Leu Pro His Gly Ala Asp Glu
545                 550                 555                 560
Val Tyr Ile Leu Arg Cys Arg Phe Cys Gly Leu Val Phe Arg Gly Pro
                565                 570                 575
Leu Ser Val Gln Glu Asp Trp Ile Lys His Leu Gln Arg His Ile Val
            580                 585                 590
Asn Ala Asn Leu Pro Arg Thr Gly Ala Gly Met Val Glu Val Thr Ser
        595                 600                 605
Leu Leu Lys Lys Pro Ala Ser Ile Thr Glu Thr Ser Phe Ser Leu Leu
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625                 630
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<211> 2800
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (176)..(619)

<400> 11961
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gttctcagaa gaaactgggg cttctggtac aaggaaaggg aaacaaccac ataaacgcaa 360
gaaaaaatcc aggaaaaagt ctctcaaaaa acctgcttta ttcttagagg cagaaagtaa 420
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<210> 11962
<211> 148
<212> PRT
<213> Homo sapiens

<400> 11962
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35 40 45
Ala Ser Gly Thr Arg Lys Gly Lys Gln Pro His Lys Arg Lys Lys Lys

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 65                  70                  75                  80
Ser Asn Thr Ser His Ser Asp Asp Ser Ala Ser Ser Ser Ser Glu Glu
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Ser Glu Glu Arg Asp Thr Lys Lys Thr Lys Arg Lys Lys Arg Glu Lys
            100                 105                 110
Lys Ala His Thr Ser Val Thr Asn Asn Glu Ile Gln Glu Arg Thr Asn
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Lys Arg Thr Asn Trp Lys Val Ala Thr Asp Glu Arg Ser Ala Glu Ser
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<210> 11963
<211> 2836
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (147)..(1409)

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<211> 421
<212> PRT
<213> Homo sapiens

<400> 11964
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Ser Leu Leu Pro Leu Ala Val His Trp His His Thr Ala Ser Lys Ser
35 40 45
Leu Thr Cys Ala Trp Gln Gln His Glu Asp His Phe Glu Leu Lys Tyr
50 55 60
Ala Asn Thr Val Met Arg Phe Asp Tyr Val Trp Leu Arg Asp His Cys
65 70 75 80
Arg Ser Ala Ser Cys Tyr Asn Ser Lys Thr His Gln Arg Ser Leu Asp
85 90 95
Thr Ala Ser Val Asp Leu Cys Ile Lys Pro Lys Thr Ile Arg Leu Asp
100 105 110
Glu Thr Thr Leu Phe Phe Thr Trp Pro Asp Gly His Val Thr Lys Tyr

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    130                 135                 140
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145                 150                 155                 160
Gln Val Pro Ser Val Asp Cys Gln Ser Phe Leu Glu Thr Asn Glu Gly
                165                 170                 175
Leu Lys Lys Phe Leu Gln Asn Phe Leu Leu Tyr Gly Ile Ala Phe Val
            180                 185                 190
Glu Asn Val Pro Pro Thr Gln Glu His Thr Glu Lys Leu Ala Glu Arg
        195                 200                 205
Ile Ser Leu Ile Arg Glu Thr Ile Tyr Gly Arg Met Trp Tyr Phe Thr
    210                 215                 220
Ser Asp Phe Ser Arg Gly Asp Thr Ala Tyr Thr Lys Leu Ala Leu Asp
225                 230                 235                 240
Arg His Thr Asp Thr Thr Tyr Phe Gln Glu Pro Cys Gly Ile Gln Val
                245                 250                 255
Phe His Cys Leu Lys His Glu Gly Thr Gly Gly Arg Thr Leu Leu Val
            260                 265                 270
Asp Gly Phe Tyr Ala Ala Glu Gln Val Leu Gln Lys Ala Pro Glu Glu
        275                 280                 285
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<213> Homo sapiens

<400> 11970

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Phe	Lys	Val	Glu	Val	Asn	Val	Ile	His	Thr	Ala	Asn	Pro	Met	Glu	His
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Ser	Phe	Val	Asp	Leu	Ser	Gly	His	Asn	Leu	Ala	Asn	Pro	His	Pro	Phe
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Tyr Glu Asp Gln His Ser Ser Glu Glu Glu Glu Glu Glu Glu Glu Glu
275 280 285
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<213> Homo sapiens

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<222> (219)..(1859)

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<212> PRT
<213> Homo sapiens

<400> 11972
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50 55 60
Gly Glu Val Tyr Tyr Arg Ser Lys Tyr Leu Arg Ser Asp Thr Tyr Asn
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Leu Ser His Thr Ile Pro Asp Phe Thr Asp Asn Cys Leu Ile Asn Ile
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Ile Pro Ser Arg Ser Leu Leu Ser Pro Ser Tyr Tyr His Ser Phe Gly
225                 230                 235                 240
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                245                 250                 255
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            260                 265                 270
Cys Leu Ala Phe His Arg Glu Glu Lys Thr Tyr Ile His Ile Ile Asp
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Gln Arg Thr Arg Gln Pro Val Gln Thr Lys Phe Tyr Thr Gly Ala Met
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Val Val Phe His His Val Asn Ala Tyr Glu Glu Asp Gly Cys Ile Val
305                 310                 315                 320
Phe Asp Val Ile Ala Tyr Glu Asp Asn Ser Leu Tyr Gln Leu Phe Tyr
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Leu Ala Asn Leu Asn Gln Asp Phe Lys Glu Asn Ser Arg Leu Thr Ser
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Val Pro Thr Leu Arg Arg Phe Ala Val Pro Leu His Val Asp Lys Asn
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Tyr Glu Gly Leu Glu Leu Pro Arg Val Asn Tyr Ala His Asn Gly Lys
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Gln Tyr Arg Tyr Val Phe Ala Thr Gly Val Gln Trp Ser Pro Ile Pro
            420                 425                 430
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        435                 440                 445
Arg Glu Asp Asp Cys Trp Pro Ala Glu Pro Leu Phe Val Pro Ala Pro
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Gly Ala Lys Asp Glu Asp Asp Gly Val Ile Leu Ser Ala Ile Val Ser
465                 470                 475                 480
Thr Asp Pro Gln Lys Leu Pro Phe Leu Leu Ile Leu Asp Ala Lys Ser
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Phe Thr Glu Leu Ala Arg Ala Ser Val Asp Val Asp Met His Met Asp
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Leu His Gly Leu Phe Ile Thr Asp Met Asp Trp Asp Thr Lys Lys Gln
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545

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<212> DNA
<213> Homo sapiens

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<221> CDS
<222> (60)..(404)

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<400> 11974

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Thr	Ala	Ile	Tyr	Arg	Ile	Thr	Thr	Thr	Phe	Gly	Glu	His	Leu	Asn	Ala
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<212> DNA
<213> Homo sapiens

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<221> CDS
<222> (66)..(1223)

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<400> 11975

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<211> 386
<212> PRT
<213> Homo sapiens

<400> 11976

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     50                  55                  60
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Ser Ala Ser Gly Ser Ala Ser Ala Asp Ser Val Leu Ser Arg Ile Asn
                 85                  90                  95
Gln Arg Leu Asp Met Val Pro His Leu Glu Thr Asp Met Met Gln Gly
            100                 105                 110
Gly Val Tyr Gly Ser Gly Gly Glu Arg Tyr Asp Ser Tyr Glu Ser Cys
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    130                 135                 140
Asp Tyr Ser Glu Leu Asp Pro Glu Met Glu Met Ala Tyr Glu Gly Gln
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            180                 185                 190
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        195                 200                 205
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Asn Ile Ile Pro Glu Tyr Gly Met Phe Gln Gly Met Arg Gly Gly Gly
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Ser Lys Ala Thr Arg Thr Asp Cys Ser Asp Asn Ser Asp Ser Asp Asn
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<213> Homo sapiens

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35 40 45
Arg Glu Leu Val Cys Lys Glu Ser Lys Lys Thr Phe Lys Ala Thr Ile
50 55 60
Ala Met Ser Gln Glu Phe Pro Leu Gly Ile Glu Leu Leu Leu Asn Val
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Val Gln Met Lys Leu Pro Pro Gly Phe Pro Val Lys Leu Asp Ile Pro

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<400> 11981

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Cys	Gly	Ile	Cys	Lys	Gln	Gln	Phe	Asn	Asn	Leu	Asp	Ala	Phe	Val	Ala
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Gln	Thr	Thr	Thr	Arg	Thr	Ile	Thr	Ser	Glu	Thr	Gln	Thr	Ile	Thr	Val
				85					90					95	
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Thr	Glu	Ser	Asn	Glu	Asn	Gln	Thr	Ala	Thr	Val	Ile	Ser	Leu	Pro	Ala
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0060209-0960209

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195 200 205
Asp Tyr Ala Ala Ala Asp Ser Ser Ser Leu Asn Lys His Leu Arg Ile
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Arg Asn Ser Ser Gln Leu Thr Val His Leu Arg Ser His Thr Gly Asp
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<400> 11982

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09/25/2003 09:45:56

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            100                 105                 110
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225                 230                 235                 240
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Ser Met Asn Gln Leu Ser Gln Gln Lys Pro Asn Gln Trp Leu Asn Gln
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Phe Val Pro Pro Gln Gly Ser Pro Thr Met Gly Ser Ser Val Met Gly
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    50                  55                  60
Phe Leu Lys Leu Ala Asp Val Phe Arg Val Gly Asn Asn Phe Leu Arg
65                  70                  75                  80
Leu Cys Val Leu Lys Val Thr Gln Gln Ser Glu Lys His Leu Glu Lys
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Ile Leu Asn Val Asp Glu Phe Val Lys Arg Ile Phe Ser Val Ile His
            100                 105                 110
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Ala Ala Ala Asn Phe Ser Ala Gln Ser Lys Asp Phe Ala Val Gly Ile
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Cys Asn Lys Ile Ser Glu Met Ile Gln Gly Leu Ala Thr Pro Val Asp
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Tyr Pro Ser Thr Lys Met Val Ile Val Ser Leu His Thr Phe Thr Leu
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Asp Tyr Lys Ile Pro Ile Asp Asn Met Thr Asn Glu Met Glu Gln Arg
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Val Glu Pro His Asn Asp Tyr Phe Ser Thr Gln Phe Leu Leu Asn Phe
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Ala Asn Gly Ile Val Trp Lys Thr Gly Pro Arg Thr Thr Ile Phe Val
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Lys Ser Leu Glu Asp Pro Tyr Ser Gln Gln Ile Arg Leu Gln Gln Gln
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<212> PRT
<213> Homo sapiens

<400> 11987

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Pro Glu Leu Lys Ser Gln Ala Glu Arg Leu Phe Asn Leu Val His Gln
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Ala Tyr Glu Val Leu Ser Asp Pro Gln Thr Arg Ala Ile Tyr Asp Ile
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Tyr Gly Lys Arg Gly Leu Glu Met Glu Gly Trp Glu Val Val Glu Arg
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Glu Arg Glu Glu Arg Arg Leu Gln Gln Arg Thr Asn Pro Lys Gly Thr
        115                 120                 125
Ile Ser Val Gly Val Asp Ala Thr Asp Leu Phe Asp Arg Tyr Asp Glu
    130                 135                 140
Glu Tyr Glu Asp Val Ser Gly Ser Ser Phe Pro Gln Ile Glu Ile Asn
145                 150                 155                 160
Lys Met His Ile Ser Gln Ser Ile Glu Ala Pro Leu Thr Ala Thr Asp
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Thr Ala Ile Leu Ser Gly Ser Leu Ser Thr Gln Asn Gly Asn Gly Gly
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Gly Ser Ile Asn Phe Ala Leu Arg Arg Val Thr Ser Ala Lys Gly Trp
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Gly Glu Leu Glu Phe Gly Ala Gly Asp Leu Gln Gly Pro Leu Phe Gly
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Leu Lys Leu Phe Arg Asn Leu Thr Pro Arg Cys Phe Val Thr Thr Asn
225                 230                 235                 240
Cys Ala Leu Gln Phe Ser Ser Arg Gly Ile Arg Pro Gly Leu Thr Thr
                245                 250                 255
Val Leu Ala Arg Asn Leu Asp Lys Asn Thr Met Gly Tyr Leu Gln Trp
            260                 265                 270
Arg Trp Gly Ile Gln Ser Ala Met Asn Thr Ser Ile Val Arg Asp Thr
        275                 280                 285
Lys Thr Ser His Phe Thr Val Ala Leu Gln Leu Gly Ile Pro His Ser
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Phe Ala Leu Ile Ile Tyr Gln His Lys Phe Gln Asp Asp Asp Gln Thr
305                 310                 315                 320
Arg Val Lys Gly Ser Leu Lys Ala Gly Phe Phe Gly Thr Val Val Glu
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Tyr Gly Ala Glu Arg Lys Ile Ser Arg His Ser Val Leu Gly Ala Ala
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Leu Pro Ser Ala Met Phe Tyr Ala Thr Val Gly Pro Leu Val Val Tyr
385                 390                 395                 400
Phe Ala Met His Arg Leu Ile Ile Lys Pro Tyr Leu Arg Ala Gln Lys
                405                 410                 415
Glu Lys Glu Leu Glu Lys Gln Arg Glu Ser Ala Ala Thr Asp Val Leu
            420                 425                 430
Gln Lys Lys Gln Glu Ala Glu Ser Ala Val Arg Leu Met Gln Glu Ser
        435                 440                 445
Val Arg Arg Ile Ile Glu Ala Glu Glu Ser Arg Met Gly Leu Ile Ile
    450                 455                 460
Val Asn Ala Trp Tyr Gly Lys Phe Val Asn Asp Lys Ser Arg Lys Ser
465                 470                 475                 480
Glu Lys Val Lys Val Ile Asp Val Thr Val Pro Leu Gln Cys Leu Val
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Lys Asp Ser Lys Leu Ile Leu Thr Glu Ala Ser Lys Ala Gly Leu Pro
            500                 505                 510
Gly Phe Tyr Asp Pro Cys Val Gly Glu Glu Lys Asn Leu Lys Val Leu
        515                 520                 525
Tyr Gln Phe Arg Gly Val Leu His Gln Val Met Val Leu Asp Ser Glu
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<222> (86)..(1573)

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        50                  55                  60
Arg Tyr Leu Ala Met Arg Gln Arg Asn Asn Leu Leu Cys Asn Gly Leu
65                  70                  75                  80
Ser Leu Lys Ser Leu Ala Glu Thr Val Leu Asn Phe Pro Leu Asp Lys
                85                  90                  95
Ser Leu Leu Leu Arg Cys Ser Asn Trp Asp Ala Glu Thr Leu Thr Glu
            100                 105                 110
Asp Gln Val Ile Tyr Ala Ala Arg Asp Ala Gln Ile Ser Val Ala Leu
        115                 120                 125
Phe Leu His Leu Leu Gly Tyr Pro Phe Ser Arg Asn Ser Pro Gly Glu
    130                 135                 140
Lys Asn Asp Asp His Ser Ser Trp Arg Lys Val Leu Glu Lys Cys Gln
145                 150                 155                 160
Gly Val Val Asp Ile Pro Phe Arg Ser Lys Gly Met Ser Arg Leu Gly
                165                 170                 175
Glu Glu Val Asn Gly Glu Ala Thr Glu Ser Gln Gln Lys Pro Arg Asn
            180                 185                 190
Lys Lys Ser Lys Met Asp Gly Met Val Pro Gly Asn His Gln Gly Arg
        195                 200                 205
Asp Pro Arg Lys His Lys Arg Lys Pro Leu Gly Val Gly Tyr Ser Ala
    210                 215                 220
Arg Lys Ser Pro Leu Tyr Asp Asn Cys Phe Leu His Ala Pro Asp Gly
225                 230                 235                 240
Gln Pro Leu Cys Thr Cys Asp Arg Arg Lys Ala Gln Trp Tyr Leu Asp
                245                 250                 255
Lys Gly Ile Gly Glu Leu Val Ser Glu Glu Pro Phe Val Val Lys Leu
            260                 265                 270
Arg Phe Glu Pro Ala Gly Arg Pro Glu Ser Pro Gly Asp Tyr Tyr Leu
        275                 280                 285
Met Val Lys Glu Asn Leu Cys Val Val Cys Gly Lys Arg Asp Ser Tyr
    290                 295                 300
Ile Arg Lys Asn Val Ile Pro His Glu Tyr Arg Lys His Phe Pro Ile
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Glu Met Lys Asp His Asn Ser His Asp Val Leu Leu Leu Cys Thr Ser
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Cys His Ala Ile Ser Asn Tyr Tyr Asp Asn His Leu Lys Gln Gln Leu
            340                 345                 350
Ala Lys Glu Phe Gln Ala Pro Ile Gly Ser Glu Glu Gly Leu Arg Leu
        355                 360                 365
Leu Glu Asp Pro Glu Arg Arg Gln Val Arg Ser Gly Ala Arg Ala Leu
    370                 375                 380
Leu Asn Ala Glu Ser Leu Pro Thr Gln Arg Lys Glu Glu Leu Leu Gln
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Pro His Gly Leu Lys Val Val Gln Cys His Ser Gln Gly Gly Leu Arg
435 440 445
Ser Leu Met Gln Leu Glu Ser Arg Trp Arg Gln His Phe Leu Asp Ser
450 455 460
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50 55 60
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Phe Gly Lys Asp Glu Asp Thr Pro His Ala Lys Ile Ala Ser Asp Ile

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Cys Arg Asn Met Ser Asn Tyr Leu Ser Leu Ala Ala Ile Thr Lys Ala
145                 150                 155                 160
Asp Leu Leu Ala Asp His Thr Glu Val Ile Val Lys Ser Ile Leu Gln
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Gly Asn Thr Met Leu Leu Arg Val Leu Pro Ala Val Tyr Glu Lys Gln
            180                 185                 190
Pro Gln Pro Ile Asn Arg His Leu Thr Glu Leu Leu Ala Leu Met Ser
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Gln Leu Glu Gln Pro Glu Gln Tyr His Leu Leu Arg Leu Leu His Val
    210                 215                 220
Ala Ala Lys Lys Lys Gln Leu Glu Val Val Gln Lys Cys Ile Pro Phe
225                 230                 235                 240
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                245                 250                 255
Ile Leu Met Glu Ile Ala Val Tyr Glu Pro Val Ala Leu Asn Ser Phe
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Leu Pro Met Leu Lys Glu Ile Gly Glu Arg Phe Pro Tyr Leu Thr Gly
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His Ser Phe His His Ile Leu Leu Leu Glu Ile Lys Ser Ile Thr Asp
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Asp His Glu Lys Leu Gln Val Lys Ile Gln Ala Phe Glu Asp Lys Ile
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Tyr Ala Met Glu Ile Gly Lys Lys Ile Pro Val Pro Asp Gln Cys Thr
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Gln Ser Leu Phe Pro Glu Pro Leu Ser Ile Gln Ser His Ser Val Gln
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705 710 715 720
Gly Lys Leu Lys Glu Lys Gln Val Arg Trp Lys Phe Ile Lys Arg Trp
725 730 735
Lys Thr Arg Tyr Phe Thr Leu Ala Gly Asn Gln Leu Leu Phe Gln Lys
740 745 750
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755 760 765
Val Gln Ser Val Lys Ala Val Ala Lys Lys Arg Arg Asp Arg Ser Leu
770 775 780
Pro Arg Ala Phe Glu Ile Phe Thr Asp Asn Lys Thr Tyr Val Phe Lys
785 790 795 800
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<210> 11993
<211> 347
<212> PRT
<213> Homo sapiens

<400> 11993

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His Pro Glu Val Pro Tyr Ser Ser Gly Ala Thr Ser Ser Thr Asn Asn
        35                  40                  45
Pro Glu Phe Val Glu Asp Leu Ser Gln Gly Gln Leu Leu Gln Ser Glu
    50                  55                  60
Ser Ser Asn Ala Ala Glu Gly Asn Glu Gln Arg His Glu Asp Glu Gln
65                  70                  75                  80
Arg Ser Lys Arg Gly Gly Trp Ser Lys Gly Arg Lys Arg Lys Lys Pro
                85                  90                  95
Leu Arg Asp Ser Asn Ala Pro Lys Ser Pro Leu Thr Gly Tyr Val Arg
            100                 105                 110
Phe Met Asn Glu Arg Arg Glu Gln Leu Arg Ala Lys Arg Pro Glu Val
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Pro Phe Pro Glu Ile Thr Arg Met Leu Gly Asn Glu Trp Ser Lys Leu
    130                 135                 140
Pro Pro Glu Glu Lys Gln Arg Tyr Leu Asp Glu Ala Asp Arg Asp Lys
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Glu Arg Tyr Met Lys Glu Leu Glu Gln Tyr Gln Lys Thr Glu Ala Tyr
                165                 170                 175
Lys Val Phe Ser Arg Lys Thr Gln Asp Arg Gln Lys Gly Lys Ser His
            180                 185                 190
Arg Gln Asp Ala Ala Arg Gln Ala Thr His Asp His Glu Lys Glu Thr
        195                 200                 205
Glu Val Lys Glu Arg Ser Val Phe Asp Ile Pro Ile Phe Thr Glu Glu
    210                 215                 220
Phe Leu Asn His Ser Lys Ala Arg Glu Ala Glu Leu Arg Gln Leu Arg
225                 230                 235                 240
Lys Ser Asn Met Glu Phe Glu Glu Arg Asn Ala Ala Leu Gln Lys His
                245                 250                 255
Val Glu Ser Met Arg Thr Ala Val Glu Lys Leu Glu Val Asp Val Ile
            260                 265                 270
Gln Glu Arg Ser Arg Asn Thr Val Leu Gln Gln His Leu Glu Thr Leu
        275                 280                 285
Arg Gln Val Leu Thr Ser Ser Phe Ala Ser Met Pro Leu Pro Gly Ser
    290                 295                 300
Gly Glu Thr Pro Thr Val Asp Thr Ile Asp Ser Tyr Met Asn Arg Leu
305                 310                 315                 320
His Ser Ile Ile Leu Ala Asn Pro Gln Asp Asn Glu Asn Phe Ile Ala
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Thr Val Arg Glu Val Val Asn Arg Leu Asp Arg
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<210> 11994
<211> 2256
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (125)..(1366)

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ggagaagact cagtgggaac atccaaaaac tggaaaaaga aaacgagtgg caggagattt 300
gccatacgga tgggaacaag aaactgatga gaacggacaa gtgtttttg ttgaccatat 360
aaataaaaga accacctact tggacccaag actggcgttt actgtggatg ataatccgac 420

caagccaacc acccggcaaa gatacgacgg cagcaccact gccatggaaa ttctccaggg 480
cccggatttc actggcaaag tggttgtggt cactggagct aattcaggaa tagggttcga 540
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<210> 11995
<211> 414
<212> PRT
<213> Homo sapiens

<400> 11995
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Glu Leu Pro Pro Gly Trp Glu Glu Arg Thr Thr Lys Asp Gly Trp Val
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Tyr Tyr Ala Asn His Thr Glu Glu Lys Thr Gln Trp Glu His Pro Lys
35 40 45
Thr Gly Lys Arg Lys Arg Val Ala Gly Asp Leu Pro Tyr Gly Trp Glu
50 55 60
Gln Glu Thr Asp Glu Asn Gly Gln Val Phe Phe Val Asp His Ile Asn

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Lys Arg Thr Thr Tyr Leu Asp Pro Arg Leu Ala Phe Thr Val Asp Asp
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Asn Pro Thr Lys Pro Thr Thr Arg Gln Arg Tyr Asp Gly Ser Thr Thr
            100                 105                 110
Ala Met Glu Ile Leu Gln Gly Pro Asp Phe Thr Gly Lys Val Val Val
        115                 120                 125
Val Thr Gly Ala Asn Ser Gly Ile Gly Phe Glu Thr Ala Lys Ser Phe
    130                 135                 140
Ala Leu His Gly Ala His Val Ile Leu Ala Cys Arg Asn Met Ala Arg
145                 150                 155                 160
Ala Ser Glu Ala Val Ser Arg Ile Leu Glu Glu Trp His Lys Ala Lys
                165                 170                 175
Val Glu Ala Met Thr Leu Asp Leu Ala Leu Leu Arg Ser Val Gln His
            180                 185                 190
Phe Ala Glu Ala Phe Lys Ala Lys Asn Val Pro Leu His Val Leu Val
        195                 200                 205
Cys Asn Ala Ala Thr Phe Ala Leu Pro Trp Ser Leu Thr Lys Asp Gly
    210                 215                 220
Leu Glu Thr Thr Phe Gln Val Asn His Leu Gly His Phe Tyr Leu Val
225                 230                 235                 240
Gln Leu Leu Gln Asp Val Leu Cys Arg Ser Ala Pro Ala Arg Val Ile
                245                 250                 255
Val Val Ser Ser Glu Ser His Arg Phe Thr Asp Ile Asn Asp Ser Leu
            260                 265                 270
Gly Lys Leu Asp Phe Ser Arg Leu Ser Pro Thr Lys Asn Asp Tyr Trp
        275                 280                 285
Ala Met Leu Ala Tyr Asn Arg Ser Lys Leu Cys Asn Ile Leu Phe Ser
    290                 295                 300
Asn Glu Leu His Arg Arg Leu Ser Pro Arg Gly Val Thr Ser Asn Ala
305                 310                 315                 320
Val His Pro Gly Asn Met Met Tyr Ser Asn Ile His Arg Ser Trp Trp
                325                 330                 335
Val Tyr Thr Leu Leu Phe Thr Leu Ala Arg Pro Phe Thr Lys Ser Met
            340                 345                 350
Gln Gln Gly Ala Ala Thr Thr Val Tyr Cys Ala Ala Val Pro Glu Leu
        355                 360                 365
Glu Gly Leu Gly Gly Met Tyr Phe Asn Asn Cys Cys Arg Cys Met Pro
    370                 375                 380
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<210> 11996
<211> 2295
<212> DNA

05052005:054000

<213> Homo sapiens

<220>
<221> CDS
<222> (47)..(2038)

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09512350.0041300

<210> 11997
<211> 664
<212> PRT
<213> Homo sapiens

<400> 11997

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Ile Ile Asp Ala Ile Phe Asn Ser Tyr Pro Asp Ser Ser Gln Ser Arg
        35                  40                  45
Phe Cys Ile Val Leu Gln Ile Phe Leu Arg Leu Phe Gly Val Phe Ala
    50                  55                  60
Ser Ser Ile Val Leu Ile Leu Ser Gln Arg Ser Leu Phe Lys Phe Tyr
65                  70                  75                  80
Thr Tyr Ser Ser Ala Phe Leu Leu Ala Ala Thr Ser Val Leu Val Asn
                85                  90                  95
Tyr Tyr Ala Ser Leu His Ile Asp Phe Tyr Gly Ala Tyr Asn Thr Ser
            100                 105                 110
Ala Phe Gly Ile Glu Leu Leu Pro Arg Lys Gly Pro Ser Leu Trp Met
        115                 120                 125
Ala Leu Ile Val Leu Gln Leu Thr Phe Gly Ile Gly Tyr Val Thr Leu
    130                 135                 140
Leu Gln Ile His Ser Ile Tyr Ser Gln Leu Ile Ile Leu Asp Leu Leu
145                 150                 155                 160
Val Pro Val Ile Gly Leu Ile Thr Glu Leu Pro Leu His Ile Arg Glu
                165                 170                 175
Thr Leu Leu Phe Thr Ser Ser Leu Ile Leu Thr Leu Asn Thr Val Phe
            180                 185                 190
Val Leu Ala Val Lys Leu Lys Trp Phe Tyr Tyr Ser Thr Arg Tyr Val
        195                 200                 205
Tyr Leu Leu Val Arg His Met Tyr Arg Ile Tyr Gly Leu Gln Leu Leu
    210                 215                 220
Met Glu Asp Thr Trp Lys Arg Ile Arg Phe Pro Asp Ile Leu Arg Val
225                 230                 235                 240
Phe Trp Leu Thr Arg Val Thr Ala Gln Ala Thr Val Leu Met Tyr Ile
                245                 250                 255
Leu Arg Met Ala Asn Glu Thr Asp Ser Phe Phe Ile Ser Trp Asp Asp
            260                 265                 270
Phe Trp Asp Leu Ile Cys Asn Leu Ile Ile Ser Gly Cys Asp Ser Thr
        275                 280                 285
Leu Thr Val Leu Gly Met Ser Ala Val Ile Ser Ser Val Ala His Tyr
    290                 295                 300
Leu Gly Leu Gly Ile Leu Ala Phe Ile Gly Ser Thr Glu Glu Asp Asp
305                 310                 315                 320
Arg Arg Leu Gly Phe Val Ala Pro Val Leu Phe Phe Ile Leu Ala Leu
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09529508.030200

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Ser Arg Asn Met Cys Leu Leu Leu Thr Ala Val Leu His Phe Ile His
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Gly Met Thr Asp Pro Val Leu Met Ser Leu Ser Ala Ser His Val Ser
    370                 375                 380
Ser Phe Arg Arg His Phe Pro Val Leu Phe Val Ser Ala Cys Leu Phe
385                 390                 395                 400
Ile Leu Pro Val Leu Leu Ser Tyr Val Leu Trp His His Tyr Ala Leu
                405                 410                 415
Asn Thr Trp Leu Phe Ala Val Thr Ala Phe Cys Val Glu Leu Cys Leu
            420                 425                 430
Lys Val Ile Val Ser Leu Thr Val Tyr Thr Leu Phe Met Ile Asp Gly
        435                 440                 445
Tyr Tyr Asn Val Leu Trp Glu Lys Leu Asp Asp Tyr Val Tyr Tyr Val
    450                 455                 460
Arg Ser Thr Gly Ser Ile Ile Glu Phe Ile Phe Gly Val Val Met Phe
465                 470                 475                 480
Gly Asn Gly Ala Tyr Thr Met Met Phe Glu Ser Gly Ser Lys Ile Arg
                485                 490                 495
Ala Phe Met Met Cys Leu His Ala Tyr Phe Asn Ile Tyr Leu Gln Ala
            500                 505                 510
Lys Asn Gly Trp Lys Thr Phe Met Asn Arg Arg Thr Ala Val Lys Lys
        515                 520                 525
Ile Asn Ser Leu Pro Glu Ile Lys Gly Ser Arg Leu Gln Glu Ile Asn
    530                 535                 540
Asp Val Cys Ala Ile Cys Tyr His Glu Phe Thr Thr Ser Ala Arg Ile
545                 550                 555                 560
Thr Pro Cys Asn His Tyr Phe His Ala Leu Cys Leu Arg Lys Trp Leu
                565                 570                 575
Tyr Ile Gln Asp Thr Cys Pro Met Cys His Gln Lys Val Tyr Ile Glu
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Asp Asp Ile Lys Asp Asn Ser Asn Val Ser Asn Asn Asn Gly Phe Ile
        595                 600                 605
Pro Pro Asn Glu Thr Pro Glu Glu Ala Val Arg Glu Ala Ala Ala Glu
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Ser Asp Arg Glu Leu Asn Glu Asp Asp Ser Thr Asp Cys Asp Asp Asp
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<210> 11998
<211> 2858
<212> DNA
<213> Homo sapiens

0550450-050800

<220>
<221> CDS
<222> (19)..(1221)

<400> 11998
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<210> 12009
<211> 100
<212> PRT
<213> Homo sapiens

<400> 12009

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             20                  25                  30
Gln Asp Pro Glu Gln Ala Ser Thr Pro Ala Gly Leu Asn Ser Thr Ala
         35                  40                  45
Lys Asn Leu Glu Asn His Gln Phe Pro Ala Lys Pro Leu Arg Glu Ser
     50                  55                  60
Gln Ser His Leu Leu Thr Asp Ser Gln Ser Trp Thr Glu Ser Ser Ile
 65                  70                  75                  80
Asn Pro Gly Lys Cys Lys Ala Gly Met Ser Asn Pro Ala Leu Thr Met
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Glu Asn Glu Thr
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (153)..(2144)

<400> 12010

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<212> PRT
<213> Homo sapiens

<400> 12011
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0501505.0020005

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Val Tyr Asp Ser Phe Arg Tyr Gln Gly Leu Ala Phe Ser Val Phe Phe
 65                  70                  75                  80
Val Cys Val Ala Phe Thr Ser Asn Ile Ile Cys Leu Leu Phe Ile Pro
                 85                  90                  95
Ile Gln Trp Leu Phe Phe Ala Ala Ser Thr Tyr Val Trp Val Gln Tyr
            100                 105                 110
Val Trp His Thr Glu Arg Gly Val Cys Leu Pro Thr Val Ser Leu Trp
        115                 120                 125
Ile Leu Phe Val Tyr Ile Glu Ala Ala Ile Arg Phe Lys Asp Leu Lys
    130                 135                 140
Asn Phe His Val Asp Leu Cys Arg Pro Phe Ala Ala His Cys Ile Gly
145                 150                 155                 160
Tyr Pro Val Val Thr Leu Gly Phe Gly Phe Lys Ser Tyr Val Ser Tyr
                165                 170                 175
Lys Met Arg Leu Arg Lys Gln Lys Glu Val Gln Lys Glu Asn Glu Phe
            180                 185                 190
Tyr Met Gln Leu Leu Gln Gln Ala Leu Pro Pro Glu Gln Gln Met Leu
        195                 200                 205
Gln Lys Gln Glu Lys Glu Ala Glu Glu Ala Ala Lys Gly Leu Pro Asp
    210                 215                 220
Met Asp Ser Ser Ile Leu Ile His His Asn Gly Gly Ile Pro Ala Asn
225                 230                 235                 240
Lys Lys Leu Ser Thr Thr Leu Pro Glu Ile Glu Tyr Arg Glu Lys Gly
                245                 250                 255
Lys Glu Lys Asp Lys Asp Ala Lys Lys His Asn Leu Gly Ile Asn Asn
            260                 265                 270
Asn Asn Ile Leu Gln Pro Val Asp Ser Lys Ile Gln Glu Ile Glu Tyr
        275                 280                 285
Met Glu Asn His Ile Asn Ser Lys Arg Leu Asn Asn Asp Leu Val Gly
    290                 295                 300
Ser Thr Glu Asn Leu Leu Lys Glu Asp Ser Cys Thr Ala Ser Ser Lys
305                 310                 315                 320
Asn Tyr Lys Asn Ala Ser Gly Val Val Asn Ser Ser Pro Arg Ser His
                325                 330                 335
Ser Ala Thr Asn Gly Ser Ile Pro Ser Ser Ser Ser Lys Asn Glu Lys
            340                 345                 350
Lys Gln Lys Cys Thr Ser Lys Ser Pro Ser Thr His Lys Asp Leu Met
        355                 360                 365
Glu Asn Cys Ile Pro Asn Asn Gln Leu Ser Lys Pro Asp Ala Leu Val
    370                 375                 380
Arg Leu Glu Gln Asp Ile Lys Lys Leu Lys Ala Asp Leu Gln Ala Ser
385                 390                 395                 400
Arg Gln Val Glu Gln Glu Leu Arg Ser Gln Ile Ser Ser Leu Ser Ser
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Thr Glu Arg Gly Ile Arg Ser Glu Met Gly Gln Leu Arg Gln Glu Asn
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            420                 425                 430
Glu Leu Leu Gln Asn Lys Leu His Asn Ala Val Gln Met Lys Gln Lys
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Asp Lys Gln Asn Ile Ser Gln Leu Glu Lys Lys Leu Lys Ala Glu Gln
    450                 455                 460
Glu Ala Arg Ser Phe Val Glu Lys Gln Leu Met Glu Glu Lys Lys Arg
465                 470                 475                 480
Lys Lys Leu Glu Glu Ala Thr Ala Ala Arg Ala Val Ala Phe Ala Ala
                485                 490                 495
Ala Ser Arg Gly Glu Cys Thr Glu Thr Leu Arg Asn Arg Ile Arg Glu
            500                 505                 510
Leu Glu Ala Glu Gly Lys Lys Leu Thr Met Asp Met Lys Val Lys Glu
        515                 520                 525
Asp Gln Ile Arg Glu Leu Glu Leu Lys Val Gln Glu Leu Arg Lys Tyr
    530                 535                 540
Lys Glu Asn Glu Lys Asp Thr Glu Val Leu Met Ser Ala Leu Ser Ala
545                 550                 555                 560
Met Gln Asp Lys Thr Gln His Leu Glu Asn Ser Leu Ser Ala Glu Thr
                565                 570                 575
Ile Ile Lys Leu Asp Leu Phe Ser Ala Leu Gly Asp Ala Lys Arg Gln
            580                 585                 590
Leu Glu Ile Ala Gln Gly Gln Ile Leu Gln Lys Asp Gln Glu Ile Lys
        595                 600                 605
Asp Leu Lys Gln Lys Ile Ala Glu Val Met Ala Val Met Pro Ser Ile
    610                 615                 620
Thr Tyr Ser Ala Ala Thr Ser Pro Leu Ser Pro Val Ser Pro His Tyr
625                 630                 635                 640
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Ser Val Tyr Gln Pro Leu Lys Lys
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (569)..(1618)

<400> 12012
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gatcagccag aggcagcagc agtggactca tcaattgtgg aggaagccct ggggaccctg 240
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cggtgaagca ctggccgggg tctggctggg tctggcgctc gggagccaga tggaggtggc 480
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<211> 350
<212> PRT
<213> Homo sapiens

<400> 12013
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        50                  55                  60
Leu Pro Thr Ala Arg Ala Gly Val Ala Val Thr Ala Leu Gly Lys Arg
65                  70                  75                  80
Ile Met Val Ile Gly Gly Val Gly Thr Asn Gln Leu Pro Leu Lys Val
                85                  90                  95
Val Glu Met Tyr Asn Ile Asp Glu Gly Lys Trp Lys Lys Arg Ser Met
            100                 105                 110
Leu Arg Glu Ala Ala Met Gly Ile Ser Val Thr Ala Lys Asp Tyr Arg
        115                 120                 125
Val Tyr Ala Ala Gly Gly Met Gly Leu Asp Leu Arg Pro His Asn His
    130                 135                 140
Leu Gln His Tyr Asp Met Leu Lys Asp Met Trp Val Ser Leu Ala Pro
145                 150                 155                 160
Met Pro Thr Pro Arg Tyr Ala Ala Thr Ser Phe Leu Arg Gly Ser Lys
                165                 170                 175
Ile Tyr Val Leu Gly Gly Arg Gln Ser Lys Tyr Ala Val Asn Ala Phe
            180                 185                 190
Glu Val Phe Asp Ile Glu Thr Arg Ser Trp Thr Lys Phe Pro Asn Ile
        195                 200                 205
Pro Tyr Lys Arg Ala Phe Ser Ser Phe Val Thr Leu Asp Asn His Leu
    210                 215                 220
Tyr Ser Leu Gly Gly Leu Arg Gln Gly Arg Leu Tyr Arg Gln Pro Lys
225                 230                 235                 240
Phe Leu Arg Thr Met Asp Val Phe Asp Met Glu Gln Gly Gly Trp Leu
                245                 250                 255
Lys Met Glu Arg Ser Phe Phe Leu Lys Lys Arg Arg Ala Asp Phe Val
            260                 265                 270
Ala Gly Ser Leu Ser Gly Arg Val Ile Val Ala Gly Gly Leu Gly Asn
        275                 280                 285
Gln Pro Thr Val Leu Glu Thr Ala Glu Ala Phe His Pro Gly Lys Asn
    290                 295                 300
Lys Trp Glu Ile Leu Pro Ala Met Pro Thr Pro Arg Cys Ala Cys Ser
305                 310                 315                 320
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<213> Homo sapiens

<220>
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<210> 12015
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<212> PRT
<213> Homo sapiens

<400> 12015

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            20                  25                  30
Ala Ala Thr Gln Thr Gly Lys Val Phe Ile His Asn Pro His Thr Arg
        35                  40                  45
Asn Gln His Val Ser Ala Ser Arg Val Phe Gln Ser Pro Leu Gly Ser
    50                  55                  60
Asp Val Ser Leu Leu Asn Ile Asn Gln Ala Val Ser Cys Leu Thr Ala
65                  70                  75                  80
Gly Val Leu Asn Pro Glu Leu Gly Tyr Asp Ala Leu Leu Val Gly Thr
                85                  90                  95
Gln Thr Asn Leu Leu Ala Tyr Asp Val Tyr Asn Asn Ser Asp Leu Phe
            100                 105                 110
Tyr Arg Glu Val Ala Asp Gly Ala Asn Ala Val Val Leu Gly Thr Leu
        115                 120                 125
Gly Asp Ile Ser Ser Pro Leu Ala Ile Ile Gly Gly Asn Cys Ala Leu
    130                 135                 140
Gln Gly Phe Asn His Glu Gly Ser Asp Leu Phe Trp Thr Val Thr Gly
145                 150                 155                 160
Asp Asn Val Asn Ser Leu Ala Leu Arg Asp Phe Asp Gly Asp Gly Lys
                165                 170                 175
Lys Glu Leu Leu Val Gly Ser Glu Asp Phe Asp Ile Arg Val Phe Lys
            180                 185                 190
Glu Asp Glu Ile Val Ala Glu Met Thr Glu Thr Glu Ile Val Thr Ser
        195                 200                 205
Leu Cys Pro Met Tyr Gly Ser Arg Phe Gly Tyr Ala Leu Ser Asn Gly
    210                 215                 220
Thr Val Gly Val Tyr Asp Lys Thr Ser Arg Tyr Trp Arg Ile Lys Ser
225                 230                 235                 240
Lys Asn His Ala Met Ser Ile His Ala Phe Asp Leu Asn Ser Asp Gly
                245                 250                 255
Val Asn Glu Leu Ile Thr Gly Trp Ser Asn Gly Lys Val Asp Ala Arg
            260                 265                 270
Ser Asp Arg Thr Gly Glu Val Ile Phe Lys Asp Asn Phe Ser Ser Ala
        275                 280                 285
Ile Ala Gly Val Val Glu Gly Asp Tyr Arg Met Asp Gly His Ile Gln
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Leu Ile Cys Cys Ser Val Asp Gly Glu Ile Arg Gly Tyr Leu Pro Gly
305                 310                 315                 320
Thr Ala Glu Met Arg Gly Asn Leu Met Asp Thr Ser Ala Glu Gln Asp
                325                 330                 335
Leu Ile Arg Glu Leu Ser Gln Lys Lys Gln Asn Leu Leu Leu Glu Leu
            340                 345                 350
Arg Asn Tyr Glu Glu Asn Ala Lys Ala Glu Leu Ala Ser Pro Leu Asn
        355                 360                 365
Glu Ala Asp Gly His Arg Gly Ile Ile Pro Ala Asn Thr Arg Leu His
    370                 375                 380
Thr Thr Leu Ser Val Ser Leu Gly Asn Glu Thr Gln Thr Ala His Thr
385                 390                 395                 400
Glu Leu Arg Ile Ser Thr Ser Asn Asp Thr Ile Ile Arg Ala Val Leu
                405                 410                 415
Ile Phe Ala Glu Gly Ile Phe Thr Gly Glu Ser His Val Val His Pro
            420                 425                 430
Ser Ile His Asn Leu Ser Ser Ser Ile Cys Ile Pro Ile Val Pro Pro
        435                 440                 445
Lys Asp Val Pro Val Asp Leu His Ser Lys Ala Phe Val Gly Tyr Arg
    450                 455                 460
Ser Ser Thr Gln Phe His Val Phe Glu Ser Thr Arg Gln Leu Pro Arg
465                 470                 475                 480
Phe Ser Met Tyr Ala Leu Thr Ser Leu Asp Pro Ala Ser Glu Pro Ile
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<213> Homo sapiens

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Cys	Leu	Asp	Lys	Asn	Lys	Leu	Met	Asp	Ala	Leu	Lys	His	Ala	Ser	Asn
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Leu	Val	Gln	Tyr	Ala	Gly	Asn	Ile	Ile	Pro	Arg	Leu	Tyr	Leu	Leu	Ile
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Thr	Val	Gly	Val	Val	Tyr	Val	Lys	Ser	Phe	Pro	Gln	Ser	Arg	Lys	Asp
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Ile	Leu	Lys	Asp	Leu	Val	Glu	Met	Cys	Arg	Gly	Val	Gln	His	Pro	Leu
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Leu	Pro	Asp	Glu	Gly	Glu	Pro	Thr	Asp	Glu	Glu	Thr	Thr	Gly	Asp	Ile
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Glu Phe His Leu Gln Thr Leu Asn Pro Phe Leu Arg Ala Cys Ala Glu
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Lys Leu Lys His Phe His Pro Leu Phe Glu Tyr Phe Asp Tyr Glu Ser
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Arg Lys Ser Met Ser Cys Tyr Val Leu Ser Asn Val Leu Asp Tyr Asn
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Thr Glu Ile Val Ser Gln Asp Gln Val Asp Ser Ile Met Asn Leu Val
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Ser Thr Leu Ile Gln Asp Gln Pro Asp Gln Pro Val Glu Asp Pro Asp
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Phe Ser Glu Glu Asn His Glu Pro Leu Arg Thr Gln Cys Ala Leu Ala
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Ala Ser Lys Leu Leu Lys Lys Pro Asp Gln Gly Arg Ala Val Ser Thr
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Cys Ala His Leu Phe Trp Ser Gly Arg Asn Thr Asp Lys Asn Gly Glu
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Glu Leu His Gly Gly Glu Arg Val Met Glu Cys Leu Lys Lys Ala Leu
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Lys Ile Ala Asn Gln Cys Met Asp Pro Ser Leu Gln Val Gln Leu Phe
705                 710                 715                 720
Ile Glu Ile Leu Asn Arg Tyr Ile Tyr Phe Tyr Glu Lys Glu Asn Asp
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Ala Val Thr Ile Gln Val Leu Asn Gln Leu Ile Gln Lys Ile Arg Glu
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Asp Leu Pro Asn Leu Glu Ser Ser Glu Glu Thr Glu Gln Ile Asn Lys
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<213> Homo sapiens

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Ser Ser Arg Arg Leu Phe Arg Lys Ser Ala Ala Gln Phe His Asn Leu
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Arg Phe Gly Glu Arg Arg Asp Glu Gln Met Glu Pro Glu Pro Lys Leu
        115                 120                 125
Trp Arg Gly Arg Arg Asp Thr Pro Tyr Trp Tyr Phe Leu Gln Cys Lys
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His Leu Ile Lys Glu Gly Lys Leu Val Glu Ala Leu Asp Leu Phe Glu
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Arg Gln Met Leu Lys Glu Glu Arg Leu Gln Pro Met Glu Ser Asn Tyr
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Thr Val Leu Ile Gly Gly Cys Gly Arg Val Gly Tyr Leu Lys Lys Ala
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Phe Asn Leu Tyr Asn Gln Met Lys Lys Arg Asp Leu Glu Pro Ser Asp
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Ala Thr Tyr Thr Ala Leu Phe Asn Val Cys Ala Glu Ser Pro Trp Lys
    210                 215                 220
Asp Ser Ala Leu Gln Ser Ala Leu Lys Leu Arg Gln Gln Leu Gln Ala
225                 230                 235                 240
Lys Asn Phe Glu Leu Asn Leu Lys Thr Tyr His Ala Leu Leu Lys Met
                245                 250                 255
Ala Ala Lys Cys Ala Asp Leu Arg Met Cys Leu Asp Val Phe Lys Glu
            260                 265                 270
Ile Ile His Lys Gly His Val Val Thr Glu Glu Thr Phe Ser Phe Leu
        275                 280                 285
Leu Met Gly Cys Ile Gln Asp Lys Lys Thr Gly Phe Leu Ser Lys Met
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Glu Val Val Glu Ser Gly Ser Pro Ala Glu Ser Leu Leu Leu Ala Leu
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Cys Asn Leu Ala Ile Gly Cys His Arg Pro Lys Asp Gly Leu Gln Leu
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Asp Arg Tyr Gln Gly Lys Asn Thr Tyr Leu Glu Lys Ile Asp Gly Phe
465                 470                 475                 480
Arg Ala Tyr Tyr Lys Gln Trp Leu Thr Val Met Pro Ala Glu Glu Thr
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<213> Homo sapiens

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<400> 12026

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35 40 45
Glu Thr Cys Trp Lys Gln Leu Glu Ser Ser Lys Arg Arg Phe Glu Arg
50 55 60
Asp Cys Lys Glu Ala Asp Arg Ala Gln Gln Tyr Phe Glu Lys Met Asp
65 70 75 80
Ala Asp Ile Asn Val Thr Lys Ala Asp Val Glu Lys Ala Arg Gln Gln
85 90 95
Ala Gln Ile Arg His Gln Met Ala Glu Asp Ser Lys Ala Asp Tyr Ser
100 105 110
Ser Ile Leu Gln Lys Phe Asn His Glu Gln His Glu Tyr Tyr His Thr
115 120 125
His Ile Pro Asn Ile Phe Gln Lys Ile Gln Glu Met Glu Glu Arg Arg
130 135 140
Ile Val Arg Met Gly Glu Ser Met Lys Thr Tyr Ala Glu Val Asp Arg
145 150 155 160
Gln Val Ile Pro Ile Ile Gly Lys Cys Leu Asp Gly Ile Val Lys Ala
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Ala Glu Ser Ile Asp Gln Lys Asn Asp Ser Gln Leu Val Ile Glu Ala
180 185 190
Tyr Lys Ser Gly Phe Glu Pro Pro Gly Asp Ile Glu Phe Glu Asp Tyr

0050505-0050808

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435 440 445
Thr Pro Val Tyr Ala Glu Val Lys Arg Val Gly Asp Thr Leu Leu Gly
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Met Ala Thr Gln Cys Val Gln Val Lys Asn Val Val Lys Thr Ser Pro
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Arg Tyr His Leu Val Asp Lys Glu His Asp Ser Gly Glu Gly Ser His
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<213> Homo sapiens

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Tyr Asp Ser Ile Lys Gly His Val Arg Phe Ile Asp Tyr Glu Tyr Ala
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<222> (173)..(796)

<400> 12042

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09/529,030 - 04/20/2000

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<400> 12043

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<213> Homo sapiens

<400> 12045

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Val	Thr	Pro	Asp	Leu	Leu	Phe	Ala	Glu	Gly	Thr	Ala	Ala	Tyr	Ala	Arg
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Gly	Asp	Trp	Pro	Gly	Val	Val	Leu	Ser	Met	Glu	Arg	Ala	Leu	Arg	Ser
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Arg	Ala	Ala	Leu	Arg	Ala	Leu	Arg	Leu	Arg	Cys	Arg	Thr	Gln	Cys	Ala
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Gln	Ala	Ser	Gly	Ala	Ala	Ala	Leu	Arg	Asp	Leu	Ser	Phe	Phe	Gly	Gly
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35 40 45
Tyr Thr Ala Gln Leu Lys Ala Asp Lys Glu Leu Val Lys Asp Val Tyr
50 55 60
Ser Ala Ala Lys Lys Leu Lys Met Asp Arg Val Lys Gln Val Cys Gly
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145                 150                 155                 160
Gln Arg Ser Ile Trp Glu Asn Gly Asp Asn Leu Glu Glu Leu Met Glu
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Glu Val Gln Thr Leu Tyr Tyr Ser Ala Asp His Lys Leu Leu Asp Gly
            180                 185                 190
Asn Leu Leu Asp Gly Gln Ala Glu Val Phe Gly Ser Asp Asp Asp His
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Ile Gln Phe Val Gln Lys Lys Pro Pro Arg Glu Asn Gly His Lys Gln
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Thr Ala Glu Met Asn Gly Lys Leu Ile Ala Ala Gly Gly Tyr Asn Arg
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Glu Glu Cys Leu Arg Thr Val Glu Cys Tyr Asn Pro His Thr Asp His
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Tyr Asp Leu Tyr Gln Ser Arg His Asn Thr Glu Asp Phe Thr Leu Phe
     50                  55                  60
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 65                  70                  75                  80
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Val Lys Asp Gly Glu Glu Glu Ile Val Tyr Ala Val Asp Phe Asn His
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Lys Arg Glu Ile His Leu Asn Gly Cys Ser Leu Glu Met Leu Ser Arg
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Pro Ser Leu Leu Ile Thr Asp Ser Phe Asn Ala Thr Tyr Val Gln Pro
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Arg Arg Lys Gln Arg Asp Glu Gln Leu Leu Thr Asn Val Leu Glu Thr
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Leu Arg Gly Asp Gly Asn Val Leu Ile Ala Val Asp Thr Ala Gly Arg
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Val Leu Glu Leu Ala Gln Leu Leu Asp Gln Ile Trp Arg Thr Lys Asp
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Asn Val Val Glu Phe Ser Lys Ser Gln Val Glu Trp Met Ser Asp Lys
225                 230                 235                 240
Leu Met Arg Cys Phe Glu Asp Lys Arg Asn Asn Pro Phe Gln Phe Arg
                245                 250                 255
His Leu Ser Leu Cys His Gly Leu Ser Asp Leu Ala Arg Val Pro Ser
            260                 265                 270
Pro Lys Val Val Leu Ala Ser Gln Pro Asp Leu Glu Cys Gly Phe Ser
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Arg Asp Leu Phe Ile Gln Trp Cys Gln Asp Pro Lys Asn Ser Ile Ile
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Lys Glu Ala Ala Lys Lys Leu Glu Gln Ser Lys Glu Ala Asp Ile Asp
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Pro Glu Glu Arg Ile Lys Trp Asp Glu Tyr Gly Glu Ile Ile Lys Pro
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Ile Lys Ala Arg Val Thr Tyr Ile Asp Tyr Glu Gly Arg Ser Asp Gly
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Asp Ser Ile Lys Lys Ile Ile Asn Gln Met Lys Pro Arg Gln Leu Ile
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Asp Thr Gly Val Ile Leu Glu Glu Gly Glu Leu Lys Asp Asp Gly Glu
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Asp Ser Glu Met Gln Val Glu Ala Pro Ser Asp Ser Ser Val Ile Ala
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Gln Gln Lys Ala Met Lys Ser Leu Phe Gly Asp Asp Glu Lys Glu Thr
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Gly Glu Glu Ser Glu Ile Ile Pro Thr Leu Glu Pro Leu Pro Pro His
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Glu Val Pro Gly His Gln Ser Val Phe Met Asn Glu Pro Arg Leu Ser
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Asp Phe Lys Gln Val Leu Leu Arg Glu Gly Ile Gln Ala Glu Phe Val
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Tyr Asp Glu Ile Ser Gln Leu Arg Leu Val Cys Lys Arg Met Asp Leu
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100 105 110
His Asn Leu Cys Gln Lys Gln Val Lys Ala Gln Leu Pro Arg Arg Glu
115 120 125
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Gly Ser Asp Val Ser Gly Arg Leu Met Gly Ser Pro Pro Val Pro Gly
225                 230                 235                 240
Pro Ser Ala Ala Leu Thr Thr Met Gln Leu Phe Ser Lys Gln Asn Pro
                245                 250                 255
Ser Arg Gln Glu Val Thr Lys Leu Gln Gln Gln Val Lys Thr Asn Gly
            260                 265                 270
Ala Gly Val Thr Val Leu Arg Arg Glu Ile Ser Glu Leu Arg Thr Lys
        275                 280                 285
Val Gln Glu Gln Gln Lys Gln Leu Gln Asp Gln Asp Gln Lys Leu Leu
    290                 295                 300
Glu Gln Thr Gln Ile Ile Gly Glu Gln Asn Ala Arg Leu Ala Glu Leu
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<400> 12054

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His Arg Gly Leu Gly Val His Leu Ser Phe Val Arg Ser Val Thr Met
    50                  55                  60
Asp Lys Trp Lys Asp Ile Glu Leu Glu Lys Met Lys Ala Gly Gly Asn
65                  70                  75                  80
Ala Lys Phe Arg Glu Phe Leu Glu Ser Gln Glu Asp Tyr Asp Pro Cys
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Trp Ser Leu Gln Glu Lys Tyr Asn Ser Arg Ala Ala Ala Leu Phe Arg
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Asp Lys Val Val Ala Leu Ala Glu Gly Arg Glu Trp Ser Leu Glu Ser
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Ser Pro Ala Gln Asn Trp Thr Pro Pro Gln Pro Arg Thr Leu Pro Ser
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Met Val His Arg Val Ser Gly Gln Pro Gln Ser Val Thr Ala Ser Ser
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225                 230                 235                 240
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<400> 12057

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<213> Homo sapiens

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<213> Homo sapiens

<400> 12059

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Pro Gln Leu Cys Gly Arg Ala Val Lys Pro Ala Val Leu Gly Thr Pro
65                  70                  75                  80
His Ser Leu Pro His Leu Met Lys Pro Ser Ile Ser Pro Ala Phe Leu
                85                  90                  95
His Leu Asn Lys Ala His Gln Asn Leu Ser His Ile Pro Leu Ala Gln
            100                 105                 110
Gln Gln Leu Met Lys Phe Glu Asn Ile His Thr Asn Asn Lys Pro Gly
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Gly Ser Ser Ser Ser Ser Ser Ser Ser Ile Asn Ser Pro Asp Arg Ala
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Ser Gly Pro Glu Gly Ser Leu Ser Gln Thr Met Ala Gly Ser Ser Pro

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<210> 12069
<211> 189
<212> PRT
<213> Homo sapiens

<400> 12069

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Gly	Ala	Lys	Leu	Arg	Lys	Val	Ser	Arg	Met	Glu	Asp	Thr	Ser	Phe	Pro
			20					25				30			
Ser	Gly	Gly	Asn	Ala	Ile	Gly	Val	Asn	Ser	Ala	Ser	Ser	Lys	Thr	Asp
		35					40					45			
Thr	Gly	Arg	Gly	Asn	Gly	Pro	Leu	Pro	Leu	Gly	Gly	Ser	Gly	Leu	Met

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Glu Glu Met Ser Ala Leu Leu Ala Arg Arg Arg Arg Ile Ala Glu Lys
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Gly Ser Thr Ile Glu Thr Glu Gln Lys Glu Asp Lys Gly Glu Asp Ser
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Glu Pro Val Thr Ser Lys Ala Ser Ser Thr Ser Thr Pro Glu Pro Thr
            100                 105                 110
Arg Lys Pro Trp Glu Arg Thr Asn Thr Met Asn Gly Ser Lys Ser Pro
        115                 120                 125
Val Ile Ser Arg Pro Lys Ser Thr Pro Leu Ser Gln Pro Ser Ala Asn
    130                 135                 140
Gly Val Gln Thr Glu Gly Leu Asp Tyr Asp Arg Leu Lys Gln Asp Ile
145                 150                 155                 160
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cagcagctgc agcgagacct gggcccccac cactttaacg tgctcgcctt cccctgcaac 300
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<210> 12071
<211> 187
<212> PRT
<213> Homo sapiens

<400> 12071

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             20                  25                  30
Ile Arg Gly Lys Leu Val Ser Leu Glu Lys Tyr Arg Gly Ser Val Ser
         35                  40                  45
Leu Val Val Asn Val Ala Ser Glu Cys Gly Phe Thr Asp Gln His Tyr
     50                  55                  60
Arg Ala Leu Gln Gln Leu Gln Arg Asp Leu Gly Pro His His Phe Asn
 65                  70                  75                  80
Val Leu Ala Phe Pro Cys Asn Gln Phe Gly Gln Gln Glu Pro Asp Ser
                 85                  90                  95
Asn Lys Glu Ile Glu Ser Phe Ala Arg Arg Thr Tyr Ser Val Ser Phe
            100                 105                 110
Pro Met Phe Ser Lys Ile Ala Val Thr Gly Thr Gly Ala His Pro Ala
        115                 120                 125
Phe Lys Tyr Leu Ala Gln Thr Ser Gly Lys Glu Pro Thr Trp Asn Phe
    130                 135                 140
Trp Lys Tyr Leu Val Ala Pro Asp Gly Lys Val Val Gly Ala Trp Asp
145                 150                 155                 160
Pro Thr Val Ser Val Glu Glu Val Arg Pro Gln Ile Thr Ala Leu Val
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<212> DNA
<213> Homo sapiens

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09/05/2003 - 09:50:00

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<210> 12073
<211> 1011
<212> PRT
<213> Homo sapiens

<400> 12073

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			20					25					30		
Gly	Lys	Asp	Gln	Val	Val	Ile	Leu	His	His	Met	Leu	Ser	Lys	Ala	Thr
		35					40					45			
Val	Lys	Ala	Arg	Pro	Ser	Val	Leu	Trp	Cys	Tyr	Lys	Lys	Glu	Leu	Gly
	50					55					60				
Phe	Ser	Ser	His	Arg	Lys	Lys	Arg	Met	Arg	Gln	Leu	Gln	Lys	Lys	Ile
65					70					75					80
Lys	Asn	Gly	Thr	Leu	Asn	Ile	Lys	Gln	Asp	Asp	Pro	Phe	Glu	Leu	Phe
				85					90					95	
Ile	Ala	Ala	Thr	Asn	Ile	Arg	Tyr	Cys	Tyr	Tyr	Asn	Glu	Thr	His	Lys
			100					105					110		
Ile	Leu	Gly	Asn	Thr	Phe	Gly	Met	Cys	Val	Leu	Gln	Asp	Phe	Glu	Ala
		115					120					125			
Leu	Thr	Pro	Asn	Leu	Leu	Ala	Arg	Thr	Val	Glu	Thr	Val	Glu	Gly	Gly
	130					135					140				
Gly	Leu	Val	Val	Ile	Leu	Leu	Arg	Thr	Met	Asn	Ser	Leu	Lys	Gln	Leu
145					150					155					160
Tyr	Thr	Val	Thr	Met	Asp	Val	His	Ser	Arg	Tyr	Arg	Thr	Glu	Ala	His
				165					170					175	
Gln	Asp	Val	Val	Gly	Arg	Phe	Asn	Glu	Arg	Phe	Ile	Leu	Ser	Leu	Ala
			180					185					190		
Ser	Cys	Lys	Lys	Cys	Leu	Val	Ile	Asp	Asp	Gln	Leu	Asn	Ile	Leu	Pro
		195					200					205			
Ile	Ser	Ser	His	Val	Ala	Thr	Met	Glu	Ala	Leu	Pro	Pro	Gln	Thr	Pro
	210					215					220				
Asp	Glu	Ser	Leu	Gly	Pro	Ser	Asp	Leu	Glu	Leu	Arg	Glu	Leu	Lys	Glu
225					230					235					240
Ser	Leu	Gln	Asp	Thr	Gln	Pro	Val	Gly	Val	Leu	Val	Asp	Cys	Cys	Lys
				245					250					255	
Thr	Leu	Asp	Gln	Ala	Lys	Ala	Val	Leu	Lys	Phe	Ile	Glu	Gly	Ile	Ser
			260					265					270		
Glu	Lys	Thr	Leu	Arg	Ser	Thr	Val	Ala	Leu	Thr	Ala	Ala	Arg	Gly	Arg
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Gly	Lys	Ser	Ala	Ala	Leu	Gly	Leu	Ala	Ile	Ala	Gly	Ala	Val	Ala	Phe

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                325                 330                 335
Glu His Leu Asp Tyr Glu Ile Ile Gln Ser Leu Asn Pro Glu Phe Asn
            340                 345                 350
Lys Ala Val Ile Arg Val Asn Val Phe Arg Glu His Arg Gln Thr Ile
        355                 360                 365
Gln Tyr Ile His Pro Ala Asp Ala Val Lys Leu Gly Gln Ala Glu Leu
    370                 375                 380
Val Val Ile Asp Glu Ala Ala Ala Ile Pro Leu Pro Leu Val Lys Ser
385                 390                 395                 400
Leu Leu Gly Pro Tyr Leu Val Phe Met Ala Ser Thr Ile Asn Gly Tyr
                405                 410                 415
Glu Gly Thr Gly Arg Ser Leu Ser Leu Lys Leu Ile Gln Gln Leu Arg
            420                 425                 430
Gln Gln Ser Ala Gln Ser Gln Val Ser Thr Thr Ala Glu Asn Lys Thr
        435                 440                 445
Thr Thr Thr Ala Arg Leu Ala Ser Ala Arg Thr Leu His Glu Val Ser
    450                 455                 460
Leu Gln Glu Ser Ile Arg Tyr Ala Pro Gly Asp Ala Val Glu Lys Trp
465                 470                 475                 480
Leu Asn Asp Leu Leu Cys Leu Asp Cys Leu Asn Ile Thr Arg Ile Val
                485                 490                 495
Ser Gly Cys Pro Leu Pro Glu Ala Cys Glu Leu Tyr Tyr Val Asn Arg
            500                 505                 510
Asp Thr Leu Phe Cys Tyr His Lys Ala Ser Glu Val Phe Leu Gln Arg
        515                 520                 525
Leu Met Ala Leu Tyr Val Ala Ser His Tyr Lys Asn Ser Pro Asn Asp
    530                 535                 540
Leu Gln Met Leu Ser Asp Ala Pro Ala His His Leu Phe Cys Leu Leu
545                 550                 555                 560
Pro Pro Val Pro Pro Thr Gln Asn Ala Leu Pro Glu Val Leu Ala Val
                565                 570                 575
Ile Gln Val Cys Leu Glu Gly Glu Ile Ser Arg Gln Ser Ile Leu Asn
            580                 585                 590
Ser Leu Ser Arg Gly Lys Lys Ala Ser Gly Asp Leu Ile Pro Trp Thr
        595                 600                 605
Val Ser Glu Gln Phe Gln Asp Pro Asp Phe Gly Gly Leu Ser Gly Gly
    610                 615                 620
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Gly Ser Arg Ala Leu Gln Leu Leu Gln Met Tyr Tyr Glu Gly Arg Phe
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705                 710                 715                 720
Lys Phe Trp Lys Arg Ala Gly Phe Val Pro Val Tyr Leu Arg Gln Thr
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Pro Asn Asp Leu Thr Gly Glu His Ser Cys Ile Met Leu Lys Thr Leu
            740                 745                 750
Thr Asp Glu Asp Glu Ala Asp Gln Gly Gly Trp Leu Ala Ala Phe Trp
        755                 760                 765
Lys Asp Phe Arg Arg Arg Phe Leu Ala Leu Leu Ser Tyr Gln Phe Ser
    770                 775                 780
Thr Phe Ser Pro Ser Leu Ala Leu Asn Ile Ile Gln Asn Arg Asn Met
785                 790                 795                 800
Gly Lys Pro Ala Gln Pro Ala Leu Ser Arg Glu Glu Leu Glu Ala Leu
                805                 810                 815
Phe Leu Pro Tyr Asp Leu Lys Arg Leu Glu Met Tyr Ser Arg Asn Met
            820                 825                 830
Val Asp Tyr His Leu Ile Met Asp Met Ile Pro Ala Ile Ser Arg Ile
        835                 840                 845
Tyr Phe Leu Asn Gln Leu Gly Asp Leu Ala Leu Ser Ala Ala Gln Ser
    850                 855                 860
Ala Leu Leu Leu Gly Ile Gly Leu Gln His Lys Ser Val Asp Gln Leu
865                 870                 875                 880
Glu Lys Glu Ile Glu Leu Pro Ser Gly Gln Leu Met Gly Leu Phe Asn
                885                 890                 895
Arg Ile Ile Arg Lys Val Val Lys Leu Phe Asn Glu Val Gln Glu Lys
            900                 905                 910
Ala Ile Glu Glu Gln Met Val Ala Ala Lys Asp Val Val Met Glu Pro
        915                 920                 925
Thr Met Lys Thr Leu Ser Asp Asp Leu Asp Glu Ala Ala Lys Glu Phe
    930                 935                 940
Gln Glu Lys His Lys Lys Glu Val Gly Lys Leu Lys Ser Met Asp Leu
945                 950                 955                 960
Ser Glu Tyr Ile Ile Arg Gly Asp Asp Glu Glu Trp Asn Glu Val Leu
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Asn Lys Ala Gly Pro Asn Ala Ser Ile Ile Ser Leu Lys Ser Asp Lys
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<211> 2620
<212> DNA

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<213> Homo sapiens

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<222> (225)..(773)

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Glu Leu Asp Leu Gly Asn Asn Glu Ile Tyr Asn Leu Pro Glu Ser Ile
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Gly Ala Leu Leu His Leu Lys Asp Leu Trp Leu Asp Gly Asn Gln Leu
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Ser Glu Leu Pro Gln Glu Ile Gly Asn Leu Lys Asn Leu Leu Cys Leu
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Asp Val Ser Glu Asn Arg Leu Glu Arg Leu Pro Glu Glu Ile Ser Gly
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Ile Cys Cys Leu Leu Glu Glu Arg Gly Gln His Leu Ser Pro Cys Leu
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Val Cys Thr Cys Ala Cys Met Arg Val Pro Ala Cys Thr Cys Ala Cys
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<213> Homo sapiens

<400> 12079

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Lys Gln Leu Ser Ala Trp Met Leu His Gly Leu Leu Leu Asp Gln His
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Glu Glu Phe Phe Ile Lys Gln Gly Pro Ser Ser Gly Asn Val Ser Ala
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Gln Pro Glu Glu Asp Glu Glu Asp Leu Gly Ile Gly Gly Leu Thr Gly
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Lys Gln Leu Arg Glu Leu Gln Asp Leu Arg Leu Ile Glu Glu Glu Asn
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Met Leu Ala Pro Ser Leu Lys Gln Phe Ser Leu Arg Val Glu Ile Leu
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Glu Ser Val Gln Met Phe Glu Asn Gln Asn Val Asn Leu Thr Arg Lys
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Val Asp Arg Ile Arg Ser Thr Val Ala Glu His Leu Trp Lys Leu Met
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Pro Gly Ala Pro Ile Gly Val His Pro Ser Leu Ala Pro Leu Ala Lys
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Ile Leu Glu Gly Ser Gly Val Asp Ala Lys Val Glu Pro Glu Val Lys
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Glu Lys Leu Val Lys Phe Met Lys Cys Gly Gly Gly Leu Leu Ile Gly
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Gly Gln Ala Trp Gly Trp Ala Asn Gln Gly Glu Asp Glu Arg Val Leu
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130 135 140
Thr Asp Asn Lys Gly Asp Thr Ser Phe Phe Lys Val Ser Lys Lys Met
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Pro Lys Ile Pro Val Leu Val Ser Cys Glu Asp Asp Leu Ser Asp Asp
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Asp Cys Phe Pro Ser Gln Leu Leu Val His Gly Ala Leu Ala Phe Pro
195 200 205
Leu Gly Leu Asp Ser Tyr His Gly Cys Val Ile Ala Ala Ala Arg Tyr
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Gly Arg Gly Arg Val Val Val Thr Gly His Lys Val Leu Phe Thr Val
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Gly Lys Leu Gly Pro Phe Leu Leu Asn Ala Val Arg Trp Leu Asp Gly

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Glu Lys Arg Val Arg Ile Tyr Leu Ser Lys Gly Pro Asn Val Lys Asn
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Val Gly Trp Gly Arg Lys Glu Thr Gln Phe His Gly Ser Glu Gly Arg
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Pro Val Thr Pro Tyr Arg Leu His Val Leu Cys Gln Gly Trp His Tyr
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Trp Lys Asn Ser Gly Gly Phe Pro Val Arg Phe Pro Tyr Pro Cys Thr
        595                 600                 605
Gln Thr Glu Leu Ala Met Ile Gly Glu Glu Glu Cys Val Leu Gly Leu
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<212> PRT
<213> Homo sapiens

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35 40 45
Ile Ser Lys Pro Asn Val Ile Ser Tyr Leu Glu Gln Gly Lys Glu Pro
50 55 60
Trp Leu Ala Asp Arg Glu Leu Thr Arg Gly Gln Trp Pro Val Leu Glu
65 70 75 80
Ser Arg Cys Glu Thr Lys Lys Leu Phe Leu Lys Lys Glu Ile Tyr Glu

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Lys Lys Glu Leu Gly Ser Gln Gly Gly His Phe Asn Gln Leu Val Phe
    130                 135                 140
Thr His Glu Asp Leu Pro Thr Leu Ser His His Pro Ser Phe Thr Leu
145                 150                 155                 160
Gln Gln Ile Ile Asn Ser Lys Lys Lys Phe Cys Ala Ser Lys Glu Tyr
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Arg Lys Thr Phe Arg His Gly Ser Gln Phe Ala Thr His Glu Ile Ile
            180                 185                 190
His Thr Ile Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ser Phe
        195                 200                 205
Arg His Pro Ser Arg Leu Thr His His Gln Lys Ile His Thr Gly Lys
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Lys Pro Phe Glu Cys Lys Glu Cys Gly Lys Thr Phe Ile Cys Gly Ser
225                 230                 235                 240
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Cys Lys Glu Cys Gly Lys Ala Phe Ser Ser Gly Ser Asn Phe Thr Arg
            260                 265                 270
His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys
        275                 280                 285
Gly Lys Ala Phe Ser Ser Gly Ser Asn Phe Thr Gln His Gln Arg Ile
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His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Asn Ala Phe
305                 310                 315                 320
Ser Gln Ser Ser Gln Leu Ile Lys His Gln Arg Ile His Thr Gly Glu
                325                 330                 335
Lys Pro Tyr Glu Cys Lys Glu Cys Glu Lys Ala Phe Arg Ser Gly Ser
            340                 345                 350
Asp Leu Thr Arg His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Glu
        355                 360                 365
Cys Lys Ile Cys Gly Lys Ala Tyr Ser Gln Ser Ser Gln Leu Ile Ser
    370                 375                 380
His His Arg Ile His Thr Ser Glu Lys Pro Tyr Glu Tyr Arg Glu Cys
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<211> 2642
<212> DNA

<213> Homo sapiens

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<222> (10)..(2328)

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<212> PRT
<213> Homo sapiens

<400> 12093

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Val	Asn	Thr	Glu	Thr	Lys	Val	Ile	Gln	Ala	Thr	Gly	Gly	Gly	Ala	Tyr
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Asn	Ile	Pro	His	Glu	Ala	Phe	Val	Tyr	Gln	Lys	Asp	Ser	Asp	Pro	Glu
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Phe	Arg	Phe	Gln	Thr	Asn	His	Pro	His	Ile	Phe	Pro	Tyr	Leu	Leu	Val
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Leu	Ala	Ser	Arg	Gly	Gln	His	Ser	Asn	Val	Asp	Met	Leu	Val	Arg	Asp
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Val	Tyr	Gly	Gly	Ala	His	Gln	Thr	Leu	Gly	Leu	Ser	Gly	Asn	Leu	Ile
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Ala Glu Gln Asp Asn Pro Asn Gln Tyr Ser Trp Gly Glu Asn Tyr Ala
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Gly Ser Ser Gly Leu Met Ser Ala Ser Pro Glu Leu Gly Pro Ala Gln
385                 390                 395                 400
Arg Ala Arg Ser Gly Thr Phe Asp Leu Leu Glu Met Asp Arg Leu Glu
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Arg Pro Leu Val Asp Leu Pro Leu Leu Leu Asp Pro Pro Ser Tyr Val
            420                 425                 430
Pro Asp Thr Val Asp Leu Thr Asp Asp Ala Leu Ala Arg Lys Tyr Trp
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Leu Thr Cys Phe Glu Glu Ala Leu Asp Gly Val Val Lys Arg Ala Val
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465                 470                 475                 480
Arg Gln Lys Tyr Trp Asn Lys Leu Gln Thr Leu Arg Gln Gln Pro Phe
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Ala Tyr Gly Thr Leu Thr Val Arg Ser Leu Leu Asp Thr Arg Glu His
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Cys Leu Asn Glu Phe Asn Phe Pro Asp Pro Tyr Ser Lys Val Lys Gln
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Val Leu Glu Ser Asp Pro Tyr Phe Gly Phe Glu Glu Ala Lys Arg Lys
            580                 585                 590
Leu Gln Glu Arg Pro Trp Leu Val Asp Ser Tyr Ser Glu Trp Leu Gln
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Arg Leu Lys Gly Pro Pro His Lys Cys Ala Leu Ile Phe Ala Asp Asn
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Ser Gly Ile Asp Ile Ile Leu Gly Val Phe Pro Phe Val Arg Glu Leu
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Leu Asn Asp Val Thr His Ser Glu Ser Leu Ile Val Ala Glu Arg Ile
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<212> PRT
<213> Homo sapiens

<400> 12095

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Ala	His	Tyr	Arg	Glu	Arg	Val	Lys	Ala	Met	Phe	Tyr	His	Ala	Tyr	Asp
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Cys	Asp	Gly	His	Asp	Thr	Trp	Gly	Ser	Phe	Ser	Leu	Thr	Leu	Ile	Asp
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Val	Val	Glu	Val	Leu	Gln	Asp	Ser	Val	Asp	Phe	Asp	Ile	Asp	Val	Asn
			100					105					110		
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		115					120					125			
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Asn	Leu	Leu	His	Gly	Val	Asn	Pro	Gly	Glu	Thr	Pro	Val	Thr	Cys	Thr
			180					185					190		
Ala	Gly	Ile	Gly	Thr	Phe	Ile	Val	Glu	Phe	Ala	Thr	Leu	Ser	Ser	Leu
		195					200					205			
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Val Asp Ser Tyr Phe Glu Tyr Leu Val Lys Gly Ala Ile Leu Leu Gln
            260                 265                 270
Asp Lys Lys Leu Met Ala Met Phe Leu Glu Tyr Asn Lys Ala Ile Arg
        275                 280                 285
Asn Tyr Thr Arg Phe Asp Asp Trp Tyr Leu Trp Val Gln Met Tyr Lys
    290                 295                 300
Gly Thr Val Ser Met Pro Val Phe Gln Ser Leu Glu Ala Tyr Trp Pro
305                 310                 315                 320
Gly Leu Gln Ser Leu Ile Gly Asp Ile Asp Asn Ala Met Arg Thr Phe
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Leu Asn Tyr Tyr Thr Val Trp Lys Gln Phe Gly Gly Leu Pro Glu Phe
            340                 345                 350
Tyr Asn Ile Pro Gln Gly Tyr Thr Val Glu Lys Arg Glu Gly Tyr Pro
        355                 360                 365
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    370                 375                 380
Gly Asp Pro Thr Leu Leu Glu Leu Gly Arg Asp Ala Val Glu Ser Ile
385                 390                 395                 400
Glu Lys Ile Ser Lys Val Glu Cys Gly Phe Ala Thr Ile Lys Asp Leu
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Arg Asp His Lys Leu Asp Asn Arg Met Glu Ser Phe Phe Leu Ala Glu
            420                 425                 430
Thr Val Lys Tyr Leu Tyr Leu Leu Phe Asp Pro Thr Asn Phe Ile His
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Asn Asn Gly Ser Thr Phe Asp Thr Val Ile Thr Pro Tyr Gly Glu Cys
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Ile Leu Gly Ala Gly Gly Tyr Ile Phe Asn Thr Glu Ala His Pro Ile
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Asp Pro Ala Ala Leu His Cys Cys Gln Arg Leu Lys Glu Glu Gln Trp
                485                 490                 495
Glu Val Glu Asp Leu Met Arg Glu Phe Tyr Ser Leu Lys Arg Cys Arg
            500                 505                 510
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        515                 520                 525
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His Leu His Phe Asp Val Glu Leu Leu Gly Asp Cys Asp Val Ile Ile
65                  70                  75                  80
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50 55 60
Val Asp Glu Lys Ser Gly Gln Val Thr Leu Glu Asp Thr Ser Thr Ser
65 70 75 80
Gly Thr Val Ile Asn Lys Leu Lys Val Val Lys Lys Gln Thr Cys Pro
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Leu Gln Thr Gly Asp Val Ile Tyr Leu Val Tyr Arg Lys Asn Glu Pro
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0050450 · 0050800

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50 55 60
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65 70 75 80
Leu Arg Leu Ile Lys Val Ile Leu Asp Glu Leu Lys Cys Ser Trp Arg
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Arg Lys Arg Leu Glu Ala Tyr Val Leu Leu Ser Ser Glu Gln Leu Phe

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Ala Asp Phe Gln Ala Leu Leu Arg Ala Glu Gln Ala Ser Gly Asp Val
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Asp Lys Leu His Pro Val Cys Pro Ala Gly Thr Phe Lys Leu Cys Pro
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225                 230                 235                 240
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Val Ala Pro Ala Arg Glu Ser Leu Glu Ile Gln His Pro Pro Pro Leu
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<212> PRT
<213> Homo sapiens

<400> 12106

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Thr Cys Ile Cys Glu Ile Ser Phe Lys Pro Gly Gln Asn Leu His Phe
     50                  55                  60
Phe Tyr Leu Val Glu Arg Tyr Leu Val Asp Leu Ile Ser Lys Gly Gly
 65                  70                  75                  80
Gln Phe Thr Ile Val Phe Phe Lys Asp Ala Glu Tyr Ala Tyr Phe Asn
                 85                  90                  95
Phe Pro Glu Leu Leu Ser Leu Arg Thr Ala Leu Ile Leu His Leu Gln
            100                 105                 110
Lys Asn Thr Thr Ile Asp Val Arg Thr Thr Phe Ser Arg Cys Leu Ser
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Lys Glu Trp Gly Ser Phe Leu Glu Glu Ser Tyr Pro Tyr Phe Leu Ile
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09529800.0956

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Leu Ile Ile His Ser Trp Ala Arg Lys Val Asn Val Val Leu Ser Ser
                165                 170                 175
Gly Gln Glu Ser Asp Val Leu Cys Leu Tyr Ala Tyr Leu Leu Pro Ser
            180                 185                 190
Met Tyr Arg His Gln Ile Phe Ser Trp Lys Asn Lys Gln Asn Ile Lys
        195                 200                 205
Asp Ala Tyr Thr Thr Leu Leu Asn Gln Leu Glu Arg Phe Lys Leu Ser
    210                 215                 220
Ala Leu Ala Pro Leu Phe Gly Ser Leu Lys Trp Asn Asn Ile Thr Glu
225                 230                 235                 240
Glu Ala His Lys Thr Val Ser Leu Leu Thr Gln Val Trp Pro Glu Gly
                245                 250                 255
Ser Asp Ile Arg Arg Val Phe Cys Val Thr Ser Cys Ser Leu Ser Leu
            260                 265                 270
Arg Met Tyr His Arg Phe Leu Gly Asn Arg Glu Pro Ser Ser Gly Gln
        275                 280                 285
Glu Thr Glu Ile Gln Gln Val Asn Ser Asn Cys Leu Thr Leu Gln Glu
    290                 295                 300
Met Glu Asp Leu Cys Lys Leu His Cys Leu Thr Val Val Phe Leu Leu
305                 310                 315                 320
His Leu Pro Leu Ser Gln Arg Ala Cys Ala Arg Val Ile Thr Ser His
                325                 330                 335
Trp Ala Glu Asp Met Lys Pro Leu Leu Gln Met Lys Lys Trp Cys Glu
            340                 345                 350
Tyr Phe Ile Leu Arg Asn Ile His Thr Phe Glu Phe Trp Asn Leu Asn
        355                 360                 365
Leu Ile His Leu Ser Asp Leu Asn Asp Glu Leu Leu Leu Lys Asn Ile
    370                 375                 380
Ala Phe Tyr Tyr Glu Asn Glu Asn Val Lys Gly Leu His Leu Asn Leu
385                 390                 395                 400
Gly Asp Thr Ile Met Lys Asp Tyr Glu Tyr Leu Trp Asn Thr Ile Ser
                405                 410                 415
Lys Leu Val Arg Asp Phe Glu Val Gly Gln Pro Phe Pro Leu Arg Thr
            420                 425                 430
Thr Lys Val Cys Phe Leu Glu Lys Lys Pro Ser Pro Ile Lys Asp Ser
        435                 440                 445
Ser Asn Glu Met Val Pro Asn Leu Gly Phe Ile Pro Thr Ser Ser Phe
    450                 455                 460
Val Val Asp Lys Phe Ala Gly Asp Ile Leu Lys Asp Leu Pro Phe Leu
465                 470                 475                 480
Lys Ser Asp Asp Pro Ile Val Thr Ser Leu Val Lys Gln Lys Glu Phe
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Asp Glu Leu Val His Trp His Ser His Lys Pro Leu Ser Asp Asp Tyr
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Asp Arg Ser Arg Cys Gln Phe Asp Glu Lys Ser Arg Asp Pro Arg Val
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0056456-0928800

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545                 550                 555                 560
Ser Lys Lys Asp Phe Ser Gly Pro Lys Ser Lys Lys Ala His Glu Thr
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Lys Ala Glu Ile Ile Ala Arg Glu Asn Lys Lys Arg Leu Phe Ala Arg
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Glu Glu Gln Lys Glu Glu Gln Lys Trp Asn Ala Leu Ser Phe Ser Ile
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Glu Glu Gln Leu Lys Glu Asn Leu His Ser Gly Ile Lys Ser Leu Glu
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Asp Phe Leu Lys Ser Cys Lys Ser Ser Cys Val Lys Leu Gln Val Glu
625                 630                 635                 640
Met Val Gly Leu Thr Ala Cys Leu Lys Ala Trp Lys Glu His Cys Arg
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Ser Glu Glu Gly Lys Thr Thr Lys Asp Leu Ser Ile Ala Val Gln Val
            660                 665                 670
Met Lys Arg Ile His Ser Leu Met Glu Lys Tyr Ser Glu Leu Leu Gln
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Glu Asp Asp Arg Gln Leu Ile Ala Arg Cys Leu Lys Tyr Leu Gly Phe
    690                 695                 700
Asp Glu Leu Ala Ser Ser Leu His Pro Ala Gln Asp Ala Glu Asn Asp
705                 710                 715                 720
Val Lys Val Lys Lys Arg Asn Lys Tyr Ser Val Gly Ile Gly Pro Ala
                725                 730                 735
Arg Phe Gln Leu Gln Tyr Met Gly His Tyr Leu Ile Arg Asp Glu Arg
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Arg Glu Leu Leu Asp Val Val Asp Lys Asn Glu Ser Ala Val Ile Val
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Ala Pro Thr Ser Ser Gly Lys Thr Tyr Ala Ser Tyr Tyr Cys Met Glu
785                 790                 795                 800
Lys Val Leu Lys Glu Ser Asp Asp Gly Val Val Val Tyr Val Ala Pro
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Thr Lys Ala Leu Val Asn Gln Val Ala Ala Thr Val Gln Asn Arg Phe
            820                 825                 830
Thr Lys Asn Leu Pro Ser Gly Glu Val Leu Cys Gly Val Phe Thr Arg
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Glu Tyr Arg His Asp Ala Leu Asn Cys Gln Val Leu Ile Thr Val Pro
    850                 855                 860
Ala Cys Phe Glu Ile Leu Leu Leu Ala Pro His Arg Gln Asn Trp Val
865                 870                 875                 880
Lys Lys Ile Arg Tyr Val Ile Phe Asp Glu Val His Cys Leu Gly Gly
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0050450-0050880

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Glu Trp Leu Gln Ser Val Lys Trp Tyr Trp Lys Gln Glu Asp Lys Ile
    930                 935                 940
Ile Glu Asn Asn Thr Ala Ser Lys Arg His Val Gly Arg Gln Ala Gly
945                 950                 955                 960
Phe Pro Lys Asp Tyr Leu Gln Val Lys Gln Ser Tyr Lys Val Arg Leu
                965                 970                 975
Val Leu Tyr Gly Glu Arg Tyr Asn Asp Leu Glu Lys His Val Cys Ser
            980                 985                 990
Ile Lys His Gly Asp Ile His Phe Asp His Phe His Pro Cys Ala Ala
        995                1000                1005
Leu Thr Thr Asp His Ile Glu Arg Tyr Gly Phe Pro Pro Asp Leu Thr
   1010                1015                1020
Leu Ser Pro Arg Glu Ser Ile Gln Leu Tyr Asp Ala Met Phe Gln Ile
1025                1030                1035                1040
Trp Lys Ser Trp Pro Arg Ala Gln Glu Leu Cys Pro Glu Asn Phe Ile
                1045                1050                1055
His Phe Asn Asn Lys Leu Val Ile Lys Lys Met Asp Ala Arg Lys Tyr
            1060                1065                1070
Glu Glu Ser Leu Lys Ala Glu Leu Thr Ser Trp Ile Lys Asn Gly Asn
        1075                1080                1085
Val Glu Gln Ala Arg Met Val Leu Gln Asn Leu Ser Pro Glu Ala Asp
   1090                1095                1100
Leu Ser Pro Glu Asn Met Ile Thr Met Phe Pro Leu Leu Val Glu Lys
1105                1110                1115                1120
Leu Arg Lys Met Glu Lys Leu Pro Ala Leu Phe Phe Leu Phe Lys Leu
                1125                1130                1135
Gly Ala Val Glu Asn Ala Ala Glu Ser Val Ser Thr Phe Leu Lys Lys
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<213> Homo sapiens

<220>
<221> CDS
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<213> Homo sapiens

0050-0050-0050-0050

0050350.0052300

<400> 12108

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Glu Ala Thr Leu Gly Ser Gly Asn Leu Arg Gln Ala Val Met Leu Pro
        35                  40                  45
Glu Gly Glu Asp Leu Asn Glu Trp Ile Ala Val Asn Thr Val Asp Phe
    50                  55                  60
Phe Asn Gln Ile Asn Met Leu Tyr Gly Thr Ile Thr Glu Phe Cys Thr
65                  70                  75                  80
Glu Ala Ser Cys Pro Val Met Ser Ala Gly Pro Arg Tyr Glu Tyr His
                85                  90                  95
Trp Ala Asp Gly Thr Asn Ile Lys Lys Pro Ile Lys Cys Ser Ala Pro
            100                 105                 110
Lys Tyr Ile Asp Tyr Leu Met Thr Trp Val Gln Asp Gln Leu Asp Asp
        115                 120                 125
Glu Thr Leu Phe Pro Ser Lys Ile Gly Val Pro Phe Pro Lys Asn Phe
    130                 135                 140
Met Ser Val Ala Lys Thr Ile Leu Lys Arg Leu Phe Arg Val Tyr Ala
145                 150                 155                 160
His Ile Tyr His Gln His Phe Asp Ser Val Met Gln Leu Gln Glu Gly
                165                 170                 175
Ala His Leu Asn Thr Ser Phe Lys His Phe Ile Phe Phe Val Gln Glu
            180                 185                 190
Phe Asn Leu Ile Asp Arg Arg Glu Leu Ala Pro Leu Gln Glu Leu Ile
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Glu Lys Leu Gly Ser Lys Asp Arg
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<212> DNA
<213> Homo sapiens

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<400> 12109

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<212> PRT
<213> Homo sapiens

<400> 12110

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             20                  25                  30
Leu Tyr Ile Leu Cys His Ile Phe Leu Thr Arg Phe Lys Lys Pro Ala
         35                  40                  45
Glu Phe Thr Thr Val Asp Asp Glu Asp Ala Thr Val Asn Lys Ile Ala
     50                  55                  60
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09529800 - 09529800

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Leu Leu Pro Phe Ser Ile Ile Ser Asn Glu Val Leu Leu Ser Leu Pro
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Arg Asn Tyr Tyr Ile Gln Trp Leu Asn Gly Ser Leu Ile His Gly Leu
100 105 110
Trp Asn Leu Val Phe Leu Phe Ser Asn Leu Ser Leu Ile Phe Leu Met
115 120 125
Pro Phe Ala Tyr Phe Phe Thr Glu Ser Glu Gly Phe Ala Gly Ser Arg
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Lys Gly Val Leu Gly Arg Val Tyr Glu Thr Val Val Met Leu Met Leu
145 150 155 160
Leu Thr Leu Leu Val Leu Gly Met Val Trp Val Ala Ser Ala Ile Val
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180 185 190
Tyr Leu Pro Tyr Leu Tyr Ser Cys Ile Ser Phe Leu Gly Val Leu Leu
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Leu Leu Val Cys Thr Pro Leu Gly Leu Ala Arg Met Phe Ser Val Thr
210 215 220
Gly Lys Leu Leu Val Lys Pro Arg Leu Leu Glu Asp Leu Glu Glu Gln
225 230 235 240
Leu Tyr Cys Ser Ala Phe Glu Glu Ala Ala Leu Thr Arg Arg Ile Cys
245 250 255
Asn Pro Thr Ser Cys Trp Leu Pro Leu Asp Met Glu Leu Leu His Arg
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Gln Val Leu Ala Leu Gln Thr Gln Arg Val Leu Leu Glu Lys Arg Arg
275 280 285
Lys Ala Ser Ala Trp Gln Arg Asn Leu Gly Tyr Pro Leu Ala Met Leu
290 295 300
Cys Leu Leu Val Leu Thr Gly Leu Ser Val Leu Ile Val Ala Ile His
305 310 315 320
Ile Leu Glu Leu Leu Ile Asp Glu Ala Ala Met Pro Arg Gly Met Gln
325 330 335
Val Val Leu Ile Phe Tyr Leu Met Val Ser Ser Val Val Gly Phe Tyr
340 345 350
Ser Ser Pro Leu Phe Arg Ser Leu Arg Pro Arg Trp His Asp Thr Ala
355 360 365
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Leu Gly Asp Phe Gly Arg Phe Asn Trp Leu Gly Asn Phe Tyr Ile Val
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Phe Leu Tyr Asn Ala Ala Phe Ala Gly Leu Thr Thr Leu Cys Leu Val
420 425 430
Lys Thr Phe Thr Ala Ala Val Arg Ala Glu Leu Ile Arg Ala Phe Gly
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0500500 - 09/08/05

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<222> (465)..(1937)

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<213> Homo sapiens

<400> 12112

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Asn	Phe	Leu	Arg	Asn	Lys	His	Lys	Ile	His	Val	Gln	Gly	Thr	Asp	Leu
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Tyr Ile Lys Gly Phe Gln Lys Leu Leu Ser Lys Gln Lys Lys Lys Met
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<213> Homo sapiens

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35 40 45
Glu Ala Tyr Glu Lys Cys Asp Arg Asp Leu Asp Glu Leu Ile Val Gln
50 55 60
His Tyr Thr Glu Leu Thr Thr Ala Ile Arg Thr Tyr Gln Ser Ile Thr
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Asp Glu Ile Glu Asn Ile Lys Gln Val Pro Gln Lys Leu Glu Gln Cys
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Met Ala Ser Lys His Tyr Leu Ser Ala Thr Asp Met Leu Val Ser Ala
145                 150                 155                 160
Val Glu Ser Leu Glu Gly Pro Leu Leu Gln Val Glu Gly Leu Ser Asp
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Leu Arg Leu Glu Leu His Ser Lys Lys Met Asn Leu His Leu Val Leu
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Ile Asp Glu Leu His Arg His Leu Tyr Ile Lys Ser Thr Ser Arg Val
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Val Gln Arg Asn Lys Glu Lys Gly Lys Ile Ser Ser Leu Val Lys Asp
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225                 230                 235                 240
Phe Leu Asp Thr Ser His Tyr Ser Thr Ala Gly Ser Ser Ser Val Arg
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Glu Asn Ser Thr Leu Phe Met Gly Ile Leu Ile Lys Gly Leu Ala Lys
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305                 310                 315                 320
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Lys Asp Asp Asp Ile Ser Arg Leu Leu Lys Ser Leu Pro Asn Trp Met
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Asp Phe Ile Arg Ala Ala Phe Gly Lys Glu Ser Glu Val Leu Ile Gly
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Ser Glu Gln Ile Met Gln Thr Leu Ser Glu Leu Ala Lys Ser Phe Gln
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His Cys Phe His Tyr Leu Ile Pro Leu Ala Lys Glu Gly Asn Tyr Ala
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Gln Tyr Tyr Glu Met Leu Tyr Asn Thr Ala Asp Glu Leu Leu Asn Leu
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Val Val Asp Gln Gly Val Lys Tyr Thr Glu Leu Glu Tyr Ile His Ala
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Leu Thr Leu Leu His Arg Ser Gln Thr Gly Val Gly Glu Leu Thr Thr
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<210> 12116
<211> 545
<212> PRT
<213> Homo sapiens

<400> 12116
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35 40 45
Gln Thr Thr Gly Thr Ile Thr Val Asn Gly Tyr His Thr Thr Val Phe
50 55 60
Gly Glu Phe Ser Asp Cys Leu Leu Asp Asn Leu Pro Gly Ile Lys Thr
65 70 75 80
Ser Gly Ser Thr Val Glu Val Ile Pro Ala Leu Pro Arg Leu Gln Ile
85 90 95
Ser Thr Ser Leu Pro Arg Ser Ala His Ser Leu Gln Pro Ser Ser Gly
100 105 110
Asp Glu Ile Ser Thr Asn Val Ser Val Gln Leu Tyr Asn Gly Glu Ser
115 120 125
Gln Gln Leu Ile Ile Lys Leu Glu Asn Ile Gly Met Glu Pro Leu Glu
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Lys Leu Glu Val Thr Ser Lys Val Leu Thr Thr Lys Glu Lys Leu Tyr
145 150 155 160
Gly Asp Phe Leu Ser Trp Lys Leu Glu Glu Thr Leu Ala Gln Phe Pro

0050250.0002800

0052680.0052680

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Leu Asp Phe Ser Cys Gln Glu Asn Leu Leu Gln Asp Leu Ser Asp Asp
        195                 200                 205
Gly Ile Ser Val Ser Gly Phe Pro Leu Ser Ser Pro Phe Arg Gln Val
    210                 215                 220
Val Arg Pro Arg Val Glu Gly Lys Pro Val Asn Pro Pro Glu Ser Asn
225                 230                 235                 240
Lys Ala Gly Asp Tyr Ser His Val Lys Thr Leu Glu Ala Val Leu Asn
                245                 250                 255
Phe Lys Tyr Ser Gly Gly Pro Gly His Thr Glu Gly Tyr Tyr Arg Asn
            260                 265                 270
Leu Ser Leu Gly Leu His Val Glu Val Glu Pro Ser Val Phe Phe Thr
        275                 280                 285
Arg Val Ser Thr Leu Pro Ala Thr Ser Thr Arg Gln Cys His Leu Leu
    290                 295                 300
Leu Asp Val Phe Asn Ser Thr Glu His Glu Leu Thr Val Ser Thr Arg
305                 310                 315                 320
Ser Ser Glu Ala Leu Ile Leu His Ala Gly Glu Cys Gln Arg Met Ala
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Ile Gln Val Asp Lys Phe Asn Phe Glu Ser Phe Pro Glu Ser Pro Gly
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Glu Lys Gly Gln Phe Ala Asn Pro Lys Gln Leu Glu Glu Glu Arg Arg
        355                 360                 365
Glu Ala Arg Gly Leu Glu Ile His Ser Lys Leu Gly Ile Cys Trp Arg
    370                 375                 380
Ile Pro Ser Leu Lys Arg Ser Gly Glu Ala Ser Val Glu Gly Leu Leu
385                 390                 395                 400
Asn Gln Leu Val Leu Glu His Leu Gln Leu Ala Pro Leu Gln Trp Asp
                405                 410                 415
Val Leu Val Asp Gly Gln Pro Cys Asp Arg Glu Ala Val Ala Ala Cys
            420                 425                 430
Gln Val Gly Asp Pro Val Arg Leu Glu Val Arg Leu Thr Asn Arg Ser
        435                 440                 445
Pro Arg Ser Val Gly Pro Phe Ala Leu Thr Val Val Pro Phe Gln Asp
    450                 455                 460
His Gln Asn Gly Val His Asn Tyr Asp Leu His Asp Thr Val Ser Phe
465                 470                 475                 480
Val Gly Ser Ser Thr Phe Tyr Leu Asp Ala Val Gln Pro Ser Gly Gln
                485                 490                 495
Ser Ala Cys Leu Gly Ala Leu Leu Phe Leu Tyr Thr Gly Asp Phe Phe
            500                 505                 510
Leu His Ile Arg Phe His Glu Asp Ser Thr Ser Lys Glu Leu Pro Pro
        515                 520                 525
Ser Trp Phe Cys Leu Pro Ser Val His Val Cys Ala Leu Glu Ala Gln
    530                 535                 540
Ala
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545

<210> 12117
<211> 1457
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (104)..(940)

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cttgtaccaa gaggtgatga agcacgcaga tccccggatc cagggctacc ctctgatggg 180
gtccccttg ctaatgacct ccattctcct gacctacgtg tacttcgttc tctcacttgg 240
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gatctttatt ctccgaaaga aagacgggca ggtgaccttc ctacatgtct tccatcactc 540
tgtgcttccc tggagctggt ggtgggggt aaagattgcc ccgggaggaa tgggctcttt 600
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<210> 12118
<211> 279
<212> PRT
<213> Homo sapiens

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1 5 10 15

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Ser Ile Leu Leu Thr Tyr Val Tyr Phe Val Leu Ser Leu Gly Pro Arg
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Ile Met Ala Asn Arg Lys Pro Phe Gln Leu Arg Gly Phe Met Ile Val
    50                  55                  60
Tyr Asn Phe Pro Leu Val Ala Leu Ser Leu Tyr Ile Val Tyr Glu Phe
65                  70                  75                  80
Leu Met Ser Gly Trp Leu Ser Thr Tyr Thr Trp Arg Cys Asp Pro Val
                85                  90                  95
Asp Tyr Ser Asn Ser Pro Glu Ala Leu Arg Met Val Arg Val Ala Trp
            100                 105                 110
Leu Phe Leu Phe Ser Lys Phe Ile Glu Leu Met Asp Thr Val Ile Phe
        115                 120                 125
Ile Leu Arg Lys Lys Asp Gly Gln Val Thr Phe Leu His Val Phe His
    130                 135                 140
His Ser Val Leu Pro Trp Ser Trp Trp Trp Gly Val Lys Ile Ala Pro
145                 150                 155                 160
Gly Gly Met Gly Ser Phe His Ala Met Ile Asn Ser Ser Val His Val
                165                 170                 175
Ile Met Tyr Leu Tyr Tyr Gly Leu Ser Ala Phe Gly Pro Val Ala Gln
            180                 185                 190
Pro Tyr Leu Trp Trp Lys Lys His Met Thr Ala Ile Gln Leu Ile Gln
        195                 200                 205
Phe Val Leu Val Ser Leu His Ile Ser Gln Tyr Tyr Phe Met Ser Ser
    210                 215                 220
Cys Asn Tyr Gln Tyr Pro Val Ile Ile His Leu Ile Trp Met Tyr Gly
225                 230                 235                 240
Thr Ile Phe Phe Met Leu Phe Ser Asn Phe Trp Tyr His Ser Tyr Thr
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Lys Gly Lys Arg Leu Pro Arg Ala Leu Gln Gln Asn Gly Ala Pro Gly
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (40)..(663)

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0050250 - 0050250 - 0050250

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aaataaagta atcaattaac agtt 2544

<210> 12120
<211> 208
<212> PRT
<213> Homo sapiens

09529460-090202

<400> 12120
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Pro Lys Cys Cys Cys Ile Lys Pro Glu Arg Ala His His Cys Ser Ile
35 40 45
Cys Lys Arg Cys Ile Arg Lys Met Asp His His Cys Pro Trp Val Asn
50 55 60
Asn Cys Val Gly Glu Lys Asn Gln Arg Phe Phe Val Leu Phe Thr Met
65 70 75 80
Tyr Ile Ala Leu Ser Ser Val His Ala Leu Ile Leu Cys Gly Phe Gln
85 90 95
Phe Ile Ser Cys Val Arg Gly Gln Trp Thr Glu Cys Ser Asp Phe Ser
100 105 110
Pro Pro Ile Thr Val Ile Leu Leu Ile Phe Leu Cys Leu Glu Gly Leu
115 120 125
Leu Phe Phe Thr Phe Thr Ala Val Met Phe Gly Thr Gln Ile His Ser
130 135 140
Ile Cys Asn Asp Glu Thr Glu Ile Glu Arg Leu Lys Ser Glu Lys Pro
145 150 155 160
Thr Trp Glu Arg Arg Leu Arg Trp Glu Gly Met Lys Ser Val Phe Gly
165 170 175
Gly Pro Pro Ser Leu Leu Trp Met Asn Pro Phe Val Gly Phe Arg Phe
180 185 190
Arg Arg Leu Pro Thr Arg Pro Arg Lys Gly Gly Pro Glu Phe Ser Val
195 200 205

<210> 12121
<211> 3106
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (50)..(1165)

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ggatccaaac tcacgcagtg accccaagct tcaagaactg atgaaggtat taattgactg 360
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tgatggacaa gtcctgcaga agcttttcga gaaactggag agtgagaagc taaatgtggc 480
tgaggtcacc cagtcagaga ttgctcagaa gcaaaaactg cagactgtcc tggagaagat 540

caatgaaacc ctgaaacttc ctcccaggag catcaagtgg aatgtggatt ctgttcatgc 600
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aattcgactc ccagaccatg tttccatcca agtggttgtg gtccagaaac gagaaggaat 720
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<210> 12122
<211> 372
<212> PRT

0502f605.0N2000

<213> Homo sapiens

<400> 12122

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Leu Gly Gly Thr Leu Ala Arg Arg Lys Lys Ala Lys Glu Val Ser Glu
         35                  40                  45
Leu Gln Glu Glu Gly Met Asn Ala Ile Asn Leu Pro Leu Ser Pro Ile
     50                  55                  60
Pro Phe Glu Leu Asp Pro Glu Asp Thr Met Leu Glu Glu Asn Glu Val
 65                  70                  75                  80
Arg Thr Met Val Asp Pro Asn Ser Arg Ser Asp Pro Lys Leu Gln Glu
                 85                  90                  95
Leu Met Lys Val Leu Ile Asp Trp Ile Asn Asp Val Leu Val Gly Glu
            100                 105                 110
Arg Ile Ile Val Lys Asp Leu Ala Glu Asp Leu Tyr Asp Gly Gln Val
        115                 120                 125
Leu Gln Lys Leu Phe Glu Lys Leu Glu Ser Glu Lys Leu Asn Val Ala
    130                 135                 140
Glu Val Thr Gln Ser Glu Ile Ala Gln Lys Gln Lys Leu Gln Thr Val
145                 150                 155                 160
Leu Glu Lys Ile Asn Glu Thr Leu Lys Leu Pro Pro Arg Ser Ile Lys
                165                 170                 175
Trp Asn Val Asp Ser Val His Ala Lys Ser Leu Val Ala Ile Leu His
            180                 185                 190
Leu Leu Val Ala Leu Ser Gln Tyr Phe Arg Ala Pro Ile Arg Leu Pro
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Asp His Val Ser Ile Gln Val Val Val Val Gln Lys Arg Glu Gly Ile
    210                 215                 220
Leu Gln Ser Arg Gln Ile Gln Glu Glu Ile Thr Gly Asn Thr Glu Ala
225                 230                 235                 240
Leu Ser Gly Arg His Glu Arg Asp Ala Phe Asp Thr Leu Phe Asp His
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Ala Pro Asp Lys Leu Asn Val Val Lys Lys Thr Leu Ile Thr Phe Val
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Asn Lys His Leu Asn Lys Leu Asn Leu Glu Val Thr Glu Leu Glu Thr
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Gln Phe Ala Asp Gly Val Tyr Leu Val Leu Leu Met Gly Leu Leu Glu
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Gly Tyr Phe Val Pro Leu His Ser Phe Phe Leu Thr Pro Asp Ser Phe
305                 310                 315                 320
Glu Gln Lys Val Leu Asn Val Ser Phe Ala Phe Glu Leu Met Gln Asp
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Gly Gly Leu Glu Lys Pro Lys Pro Arg Pro Glu Asp Ile Val Asn Cys
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<213> Homo sapiens

<220>
<221> CDS
<222> (73)..(855)

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<212> PRT
<213> Homo sapiens

<400> 12124

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Ile	Glu	Ile	Gln	Phe	Ala	Gln	Gly	Asp	Arg	Lys	Thr	Pro	Asn	Gln	Met
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Lys	Ala	Lys	Glu	Gly	Arg	Asn	Val	Tyr	Ser	Ser	Ser	Arg	Tyr	Asp	Asp
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Tyr	Asp	Arg	Tyr	Arg	Arg	Ser	Arg	Ser	Arg	Ser	Tyr	Glu	Arg	Arg	Arg
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Ser	Arg	Ser	Arg	Ser	Phe	Asp	Tyr	Asn	Tyr	Arg	Arg	Ser	Tyr	Ser	Pro
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Arg	Asn	Arg	Pro	Thr	Gly	Arg	Pro	Arg	Arg	Ser	Arg	Ser	His	Ser	Asp
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Asn	Asp	Arg	Phe	Lys	His	Arg	Asn	Arg	Ser	Phe	Ser	Arg	Ser	Lys	Ser
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Lys Thr Asp Ser Lys Thr His Tyr Lys Ser Gly Ser Arg Tyr Glu Lys
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<212> DNA
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<222> (88)..(2640)

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<212> PRT
<213> Homo sapiens

<400> 12126

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Lys Phe Leu Glu Glu Tyr Thr Ser Gln Leu Arg Arg Ile Glu Asp Ala
         35                  40                  45
Leu Asp Asp Ser Ile Gly Asp Val Trp Asp Phe Asn Leu Asp Pro Ile
     50                  55                  60
Ala Leu Lys Leu Leu Pro Tyr Glu Gln Ser Ser Leu Leu Glu Leu Ile
 65                  70                  75                  80
Lys Thr Glu Asn Lys Val Leu Asn Lys Val Ile Thr Val Tyr Ala Ala
                 85                  90                  95
Leu Cys Cys Glu Ile Lys Lys Leu Lys Tyr Glu Ala Glu Thr Lys Phe
            100                 105                 110
Tyr Asn Gly Leu Leu Phe Tyr Gly Glu Gly Ala Thr Asp Ala Ser Met
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Lys Ile Ile Glu Thr Thr Gly Val His Phe Gln Thr Met Tyr Glu His
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Leu Gly Glu Leu Leu Thr Val Leu Leu Thr Leu Asp Glu Ile Ile Asp
        195                 200                 205
Asn His Ile Thr Leu Lys Asp His Trp Thr Met Tyr Lys Arg Leu Leu
    210                 215                 220
Lys Ser Val His His Asn Pro Ser Lys Phe Gly Ile Gln Glu Glu Lys
225                 230                 235                 240
Leu Lys Pro Phe Glu Lys Phe Leu Leu Lys Leu Glu Gly Gln Leu Leu
                245                 250                 255
Asp Gly Met Ile Phe Gln Ala Cys Ile Glu Gln Gln Phe Asp Ser Leu
            260                 265                 270
Asn Gly Gly Val Ser Val Ser Lys Asn Ser Thr Phe Ala Glu Glu Phe
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Ala His Ser Ile Gln Ser Ile Phe Ala Asn Val Glu Ala Lys Leu Gly
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Glu Pro Ser Glu Ile Asp Gln Arg Asp Lys Tyr Val Gly Ile Cys Gly
305                 310                 315                 320
Leu Phe Val Leu His Phe Gln Ile Phe Arg Thr Ile Asp Lys Lys Phe
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Tyr Lys Ser Leu Leu Asp Ile Cys Lys Lys Val Pro Ala Ile Thr Leu
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Thr Ala Asn Ile Ile Trp Phe Pro Asp Asn Phe Leu Ile Gln Lys Ile
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Pro Ala Ala Ala Lys Leu Leu Asp Arg Lys Ser Leu Gln Ala Ile Lys
    370                 375                 380
Ile His Arg Asp Thr Phe Leu Gln Gln Lys Ala Gln Ser Leu Thr Lys
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Glu Ser Ile Leu Ser Lys Glu Gln Arg Met Asp Lys Phe Ala Glu Asp
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Leu Thr Asn Arg Cys Asn Val Phe Ile Gln Gly Phe Leu Tyr Ala Tyr
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Ser Ile Ser Thr Ile Ile Lys Thr Thr Met Asn Leu Tyr Met Ser Met
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Gln Lys Pro Met Thr Lys Thr Ser Val Lys Ala Leu Cys Arg Leu Val
465                 470                 475                 480
Glu Leu Leu Lys Ala Ile Glu His Met Phe Tyr Arg Arg Ser Met Val
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Leu His Ser Ile Ser Val Ala Lys Lys Arg Val Ile Ser Asp Lys Lys
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Leu Phe Pro Leu Gln Val Val Met Lys Lys Leu Asp Leu Ile Ser Glu
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Leu Arg Glu Arg Val Gln Thr Gln Cys Asp Cys Cys Phe Leu Tyr Arg
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His Arg Ala Val Phe Pro Ile Tyr Leu Asp Asp Val Tyr Glu Asn Ala
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Val Asp Ala Ala Arg Leu His Tyr Met Phe Ser Ala Leu Arg Asp Cys
625                 630                 635                 640
Val Pro Ala Met Met His Ala Arg His Leu Glu Ser Tyr Glu Ile Leu
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Leu Asp Cys Tyr Asp Lys Glu Ile Met Glu Ile Leu Asn Glu His Leu
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Leu Asp Lys Leu Cys Lys Glu Ile Glu Lys Asp Leu Arg Leu Ser Val
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His Thr His Leu Lys Leu Asp Asp Arg Asn Pro Phe Lys Val Gly Met
    690                 695                 700
Lys Asp Leu Ala Leu Phe Phe Ser Leu Asn Pro Ile Arg Phe Phe Asn
705                 710                 715                 720
Arg Phe Ile Asp Ile Arg Ala Tyr Val Thr His Tyr Leu Asp Lys Thr
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Phe Tyr Asn Leu Thr Thr Val Ala Leu His Asp Trp Ala Thr Tyr Ser
            740                 745                 750
Glu Met Arg Asn Leu Ala Ala Gln Arg Tyr Gly Leu Val Met Thr Glu
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Ala His Leu Pro Ser Gln Thr Leu Glu Gln Gly Leu Asp Val Leu Glu
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Ile Met Arg Asn Ile His Ile Phe Val Ser Arg Tyr Leu Tyr Asn Leu
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Asn Asn Gln Ile Phe Ile Glu Arg Thr Ser Asn Asn Lys His Leu Asn
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Thr Ile Asn Ile Arg His Ile Ala Asn Ser Ile Arg Thr His Gly Thr
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<213> Homo sapiens

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<222> (65)..(1933)

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<213> Homo sapiens

<400> 12128

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Leu	Arg	Lys	Arg	Glu	Trp	Thr	Ile	Gly	Arg	Arg	Arg	Gly	Cys	Asp	Leu
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Ser	Phe	Pro	Ser	Asn	Lys	Leu	Val	Ser	Gly	Asp	His	Cys	Arg	Ile	Val
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Val	Asp	Glu	Lys	Ser	Gly	Gln	Val	Thr	Leu	Glu	Asp	Thr	Ser	Thr	Ser
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Gly	Thr	Val	Ile	Asn	Lys	Leu	Lys	Val	Val	Lys	Lys	Gln	Thr	Cys	Pro
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Leu	Gln	Thr	Gly	Asp	Val	Ile	Tyr	Leu	Val	Tyr	Arg	Lys	Asn	Glu	Pro
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Glu	His	Asn	Val	Ala	Tyr	Leu	Tyr	Glu	Ser	Leu	Ser	Glu	Lys	Gln	Gly
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Met	Thr	Gln	Glu	Ser	Phe	Glu	Met	Val	Pro	Cys	Cys	Val	Ala	Gln	Ala
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Ser	Ile	Val	Ile	Thr	Gly	Ser	Gly	Gly	Gly	Gly	Ile	Ser	Pro	Lys	Gly
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Ser	Gly	Pro	Ser	Val	Ala	Ser	Asp	Glu	Val	Ser	Ser	Phe	Ala	Ser	Ala
			180					185					190		
Leu	Pro	Asp	Arg	Lys	Thr	Ala	Ser	Phe	Ser	Ser	Leu	Glu	Pro	Gln	Asp
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Gln	Glu	Asp	Leu	Glu	Pro	Glu	Lys	Lys	Lys	Met	Arg	Gly	Asp	Gly	Asp
	210					215					220				

Leu Asp Leu Asn Gly Gln Leu Leu Val Ala Gln Pro Arg Arg Asn Ala
225 230 235 240
Gln Thr Val His Glu Asp Val Arg Ala Ala Ala Gly Lys Pro Asp Lys
245 250 255
Met Glu Glu Thr Leu Thr Cys Ile Ile Cys Gln Asp Leu Leu His Asp
260 265 270
Cys Val Ser Leu Gln Pro Cys Met His Thr Phe Cys Ala Ala Cys Tyr
275 280 285
Ser Gly Trp Met Glu Arg Ser Ser Leu Cys Pro Thr Cys Arg Cys Pro
290 295 300
Val Glu Arg Ile Cys Lys Asn His Ile Leu Asn Asn Leu Val Glu Ala
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Tyr Leu Ile Gln His Pro Asp Lys Ser Arg Ser Glu Glu Asp Val Gln
325 330 335
Ser Met Asp Ala Arg Asn Lys Ile Thr Gln Asp Met Leu Gln Pro Lys
340 345 350
Val Arg Arg Ser Phe Ser Asp Glu Glu Gly Ser Ser Glu Asp Leu Leu
355 360 365
Glu Leu Ser Asp Val Asp Ser Glu Ser Ser Asp Ile Ser Gln Pro Tyr
370 375 380
Val Val Cys Arg Gln Cys Pro Glu Tyr Arg Arg Gln Ala Ala Gln Pro
385 390 395 400
Pro His Cys Pro Ala Pro Glu Gly Glu Pro Gly Ala Pro Gln Ala Leu
405 410 415
Gly Asp Ala Pro Pro Thr Ser Val Ser Leu Thr Thr Ala Val Gln Asp
420 425 430
Tyr Val Cys Pro Leu Gln Gly Ser His Ala Leu Cys Thr Cys Cys Phe
435 440 445
Gln Pro Met Pro Asp Arg Arg Ala Glu Arg Glu Gln Asp Pro Arg Val
450 455 460
Ala Pro Gln Gln Cys Ala Val Cys Leu Gln Pro Phe Cys His Leu Tyr
465 470 475 480
Trp Gly Cys Thr Arg Thr Gly Cys Tyr Gly Cys Leu Ala Pro Phe Cys
485 490 495
Glu Leu Asn Leu Gly Asp Lys Cys Leu Asp Gly Val Leu Asn Asn Asn
500 505 510
Ser Tyr Glu Ser Asp Ile Leu Lys Asn Tyr Leu Ala Thr Arg Gly Leu
515 520 525
Thr Trp Lys Asn Met Leu Thr Glu Ser Leu Val Ala Leu Gln Arg Gly
530 535 540
Val Phe Leu Leu Ser Asp Tyr Arg Val Thr Gly Asp Thr Val Leu Cys
545 550 555 560
Tyr Cys Cys Gly Leu Arg Ser Phe Arg Glu Leu Thr Tyr Gln Tyr Gln
565 570 575
Gln Asn Ile Pro Ala Ser Glu Leu Pro Val Ala Val Thr Ser Arg Pro
580 585 590
Asp Cys Tyr Trp Gly Arg Asn Cys Arg Thr Gln Val Lys Ala His His
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CS5456-9 = 0256800

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (71)..(1147)

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gctgcagagg tacgccgagg aggttgggat cttcttcact gcctctggca tggatgagat 420
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tgagcccaaa ggctatcctc ctgaagacat ctttaatcta gtgggcaaga aggtcctggt 1080
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<212> PRT
<213> Homo sapiens

<400> 12130
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Leu Asp Val Ala Lys Arg Met Ile Arg Met Ala Lys Glu Cys Gly Ala
35 40 45

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Lys Ala Leu Asp Arg Pro Tyr Thr Ser Lys His Ser Trp Gly Lys Thr
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Tyr Gly Glu His Lys Arg His Leu Glu Phe Ser His Asp Gln Tyr Arg
                 85                  90                  95
Glu Leu Gln Arg Tyr Ala Glu Glu Val Gly Ile Phe Phe Thr Ala Ser
            100                 105                 110
Gly Met Asp Glu Met Ala Val Glu Phe Leu His Glu Leu Asn Val Pro
        115                 120                 125
Phe Phe Lys Val Gly Ser Gly Asp Thr Asn Asn Phe Pro Tyr Leu Glu
    130                 135                 140
Lys Thr Ala Lys Lys Gly Arg Pro Met Val Ile Ser Ser Gly Met Gln
145                 150                 155                 160
Ser Met Asp Thr Met Lys Gln Val Tyr Gln Ile Val Lys Pro Leu Asn
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Pro Asn Phe Cys Phe Leu Gln Cys Thr Ser Ala Tyr Pro Leu Gln Pro
            180                 185                 190
Glu Asp Val Asn Leu Arg Val Ile Ser Glu Tyr Gln Lys Leu Phe Pro
        195                 200                 205
Asp Ile Pro Ile Gly Tyr Ser Gly His Glu Thr Gly Ile Ala Ile Ser
    210                 215                 220
Val Ala Ala Val Ala Leu Gly Thr Lys Val Leu Glu Arg His Ile Thr
225                 230                 235                 240
Leu Asp Lys Thr Trp Lys Gly Ser Asp His Ser Ala Ser Leu Glu Pro
                245                 250                 255
Gly Glu Leu Ala Glu Leu Val Arg Ser Val Arg Leu Val Glu Arg Ala
            260                 265                 270
Leu Gly Ser Pro Thr Lys Gln Leu Leu Pro Cys Glu Met Ala Cys Asn
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Glu Lys Leu Gly Lys Ser Val Val Ala Lys Val Lys Ile Pro Glu Gly
    290                 295                 300
Thr Ile Leu Thr Met Asp Met Leu Thr Val Lys Val Gly Glu Pro Lys
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Gly Tyr Pro Pro Glu Asp Ile Phe Asn Leu Val Gly Lys Lys Val Leu
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<220>

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<222> (76)..(1395)

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<212> PRT
<213> Homo sapiens

<400> 12132
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Asn Leu Ala Pro Ala Cys Phe Pro Gly Thr Gly Arg Gly Leu Met Ser
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Gln Thr Ser Leu Gln Glu Gly Gln Met Ile Ile Ser Leu Pro Glu Ser
65 70 75 80
Cys Leu Leu Thr Thr Asp Thr Val Ile Arg Ser Tyr Leu Gly Ala Tyr
85 90 95
Ile Thr Lys Trp Lys Pro Pro Pro Ser Pro Leu Leu Ala Leu Cys Thr
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Phe Leu Val Ser Glu Lys His Ala Gly His Arg Ser Leu Trp Lys Pro
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Tyr Leu Glu Ile Leu Pro Lys Ala Tyr Thr Cys Pro Val Cys Leu Glu
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Pro Glu Val Val Asn Leu Leu Pro Lys Ser Leu Lys Ala Lys Ala Glu
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Glu Gln Arg Ala His Val Gln Glu Phe Phe Ala Ser Ser Arg Asp Phe
165 170 175
Phe Ser Ser Leu Gln Pro Leu Phe Ala Glu Ala Val Asp Ser Ile Phe
180 185 190
Ser Tyr Ser Ala Leu Leu Trp Ala Trp Cys Thr Val Asn Thr Arg Ala
195 200 205
Val Tyr Leu Arg Pro Arg Gln Arg Glu Cys Leu Ser Ala Glu Pro Asp
210 215 220
Thr Cys Ala Leu Ala Pro Tyr Leu Asp Leu Leu Asn His Ser Pro His
225 230 235 240
Val Gln Val Lys Ala Ala Phe Asn Glu Glu Thr His Ser Tyr Glu Ile
245 250 255
Arg Thr Thr Ser Arg Trp Arg Lys His Glu Glu Val Phe Ile Cys Tyr
260 265 270
Gly Pro His Asp Asn Gln Arg Leu Phe Leu Glu Tyr Gly Phe Val Ser
275 280 285

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Lys Tyr Leu Pro Ser Thr Asp Lys Gln Met Asp Lys Lys Ile Ser Ile
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Leu Lys Asp His Gly Tyr Ile Glu Asn Leu Thr Phe Gly Trp Asp Gly
                325                 330                 335
Pro Ser Trp Arg Leu Leu Thr Ala Leu Lys Leu Leu Cys Leu Glu Ala
            340                 345                 350
Glu Lys Phe Thr Cys Trp Lys Lys Val Leu Leu Gly Glu Val Ile Ser
        355                 360                 365
Asp Thr Asn Glu Lys Thr Ser Leu Asp Ile Ala Gln Lys Ile Cys Tyr
    370                 375                 380
Tyr Phe Ile Glu Glu Thr Asn Ala Val Leu Gln Lys Val Ser His Met
385                 390                 395                 400
Lys Asp Glu Lys Glu Ala Leu Ile Asn Gln Leu Thr Leu Val Glu Ser
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Leu Trp Thr Glu Glu Leu Lys Ile Leu Arg Ala Ser Ala Glu Thr Leu
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<210> 12133
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (134)..(1567)

<400> 12133

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<212> PRT
<213> Homo sapiens

<400> 12134

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			20					25				30			
Ala	Ala	Ala	Ala	Leu	Pro	Ala	Ala	Val	Pro	Gly	Pro	Gly	Arg	Val	Tyr
		35					40					45			
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    210                 215                 220
Lys Asp Arg Ile Glu Ala Val Leu Tyr Ala Glu Phe Gly Val Val Cys
225                 230                 235                 240
Leu Ile Phe Ser Ala Thr Leu Ala Tyr Phe Pro Pro Arg Pro Pro Leu
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Pro Pro Ser Val Ala Ala Ala Ser Gln Arg Leu Ser Tyr Arg Arg Ser
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Val Cys Arg Leu Leu Ser Asn Phe Arg Phe Leu Met Ile Ala Leu Ala
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Tyr Ala Ile Pro Leu Gly Val Phe Ala Gly Trp Ser Gly Val Leu Asp
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Leu Ile Leu Thr Pro Ala His Val Ser Gln Val Asp Ala Gly Trp Ile
305                 310                 315                 320
Gly Phe Trp Ser Ile Val Gly Gly Cys Val Val Gly Ile Ala Met Ala
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Arg Phe Ala Asp Phe Ile Arg Gly Met Leu Lys Leu Ile Leu Leu Leu
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09/529,450 - 05/08/00

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<212> PRT
<213> Homo sapiens

<400> 12140

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Cys	Trp	Glu	Cys	Pro	Lys	Cys	Asn	His	Ala	Gly	Lys	Thr	Gly	Lys	Gln
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Leu	Lys	Glu	Gln	Lys	Met	Asn	Arg	Asp	Asn	Lys	Glu	Gly	Gln	Glu	Pro
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Ala	Lys	Arg	Arg	Ser	Glu	Cys	Glu	Glu	Ala	Pro	Arg	Arg	Arg	Ser	Asp
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Glu	His	Ser	Lys	Lys	Val	Pro	Pro	Asp	Gly	Leu	Leu	Arg	Arg	Lys	Ser
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Pro Gly Ile Cys Glu Arg Pro His Arg Phe Ser Lys Gly Leu Asn Gly
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Thr Pro Arg Glu Leu Arg His Gln Leu Gly Pro Ser Leu Arg Ser Pro
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Pro Arg Val Ile Ser Arg Pro Pro Pro Ser Val Ser Pro Pro Lys Cys
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Ile Gln Met Glu Arg His Val Ile Arg Pro Pro Pro Ile Ser Pro Pro
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Pro Asp Ser Leu Pro Leu Asp Asp Gly Ala Ala His Val Met His Arg
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Glu Val Trp Met Ala Val Phe Ser Tyr Leu Ser His Gln Asp Leu Cys
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Val Cys Met Arg Val Cys Arg Thr Trp Asn Arg Trp Cys Cys Asp Lys
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Ser Trp Thr Asn Ile Ser Lys Lys Gln Leu Ser Trp Leu Ile Asn Arg
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Val Gln Trp Val Glu Gly Leu Lys Asp Ala Gln Met Arg Asp Leu Leu
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Ser Pro Pro Thr Asp Asn Arg Pro Gly Gln Met Asp Asn Arg Ser Lys
        515                 520                 525
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His Leu Ser Tyr Cys Asn His Val Thr Asp Gln Ser Ile Asn Leu Leu
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Thr Ala Val Gly Thr Thr Thr Arg Asp Ser Leu Thr Glu Ile Asn Leu
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Ser Asp Cys Asn Lys Val Thr Asp Gln Cys Leu Ser Phe Phe Lys Arg
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Cys Gly Asn Ile Cys His Ile Asp Leu Arg Tyr Cys Lys Gln Val Thr
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<220>
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<222> (89)..(3028)

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<212> PRT
<213> Homo sapiens

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35 40 45
Arg Cys Val Leu Leu Ser Ala Glu Leu Leu Lys Ser Gln Ser Lys Tyr
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Tyr Cys Gln Ala Met Gln Val Tyr Lys Gly Lys Gly Trp Ser Leu Ala
    130                 135                 140
Glu Asp His Ile Asn Phe Thr Ile Gly Arg Gln Ser Tyr Thr Leu Arg
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Gln Leu Asp Asn Ala Val Ser Ala Phe Arg His Ile Leu Ile Asn Gly
                165                 170                 175
Ser Lys Gln Ser Ala Ala Gln Gln Gly Ala Phe Leu Arg Glu Tyr Leu
            180                 185                 190
Tyr Val Tyr Lys Asn Val Ser Gln Leu Ser Pro Asp Gly Pro Leu Pro
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Gln Leu Pro Leu Pro Tyr Ile Asn Ser Ser Ala Thr Arg Val Phe Phe
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305                 310                 315                 320
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            340                 345                 350
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Leu Lys Leu Phe Pro His His Ile Gly Glu Leu His Ile Leu Gly Val
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Val Tyr Asn Leu Gly Thr Ile Gln Gly Ser Met Thr Val Asp Gly Ile
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Gly Ala Leu Pro Gly Cys His Thr Gly Lys Tyr Ser Leu Ser Met Ser
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Val Arg Gly Lys Gln Asp Leu Glu Ile Gln Gly Pro Arg Leu Asn Asn
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Thr Lys Glu Glu Lys Thr Ser Val Lys Tyr Gly Pro Asp Arg Arg Leu
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Asn Phe Leu Phe Tyr Tyr Glu Ser Val Lys Lys Gln Thr Lys Ile Arg
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His Arg Ile Leu Arg His Thr Ala Ile Ile Cys Thr Ser Arg Ser Leu
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Gly Arg Gly Gly Asn Met Leu Val Phe Val Asp Val Glu Asn Thr Asn
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Thr Ser Glu Ala Gly Val Lys Glu Phe His Ile Val Gln Val Ser Ser
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Ser Ser Lys His Trp Lys Leu Gln Lys Ser Val Asn Leu Ser Glu Asn
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Lys Asp Thr Lys Leu Ala Ser Arg Glu Lys Gly Lys Phe Cys Phe Lys
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Ala Ile Arg Cys Glu Lys Glu Glu Ala Ala Thr Gln Ser Ser Glu Lys
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Tyr Thr Phe Ala Asp Ile Ile Phe Gly Asn Glu Gln Ile Ile Ser Ser
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Ala Ser Pro Cys Ala Asp Phe Phe Tyr Arg Ser Leu Ser Ser Glu Leu
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Glu Asp Ala Val Arg Leu Ile Gln Lys Cys Ser Glu Val Asp Leu Asn
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785                 790                 795                 800
Ile Leu Glu Gly Gln His His Val Ile Leu Arg Thr Ile Gly Lys Glu
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Ala Phe Ser Tyr Pro Gln Lys Gln Glu Pro Pro Glu Met Glu Leu Leu
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Glu Gln Leu Ser Ser Leu Ile Lys Thr Ser Leu His Tyr Pro Glu Ser
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Leu Arg His Lys Thr Thr Ser Pro Glu Ala Leu Glu Ile His Gly Ser
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Phe Thr Trp Leu Gly Gln Thr Gln Tyr Lys Leu Gln Leu Lys Ser Gln
        915                 920                 925
Glu Ile His Ser Leu Gln Leu Lys Ala Cys Phe Val His Thr Gly Val
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Tyr Asn Leu Gly Thr Pro Arg Val Phe Ala Lys Leu Ser Asp Gln Val
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<222> (301)..(990)

<400> 12143

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DOCKET ALARM

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Asp Gly Phe Lys Gln Trp Asp Val Leu Glu Ser Leu Asp Met Glu Ala
50 55 60
Met Leu Asp Thr Val Gln Ala Trp Leu Ser Ser Pro Gln Lys Phe Ala
65 70 75 80
Arg Ala His Gly Val Ser Val Gln Pro Glu Ala Ser Asp Thr His Ile
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Leu Leu Leu Glu Gly Phe Leu Leu Tyr Ser Tyr Lys Pro Leu Val Asp
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Glu Ala Asn Gly Val Glu Val Val Tyr Leu Asp Gly Met Lys Ser Arg
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Glu Glu Leu Phe Arg Glu Val Leu Glu Asp Ile Gln Asn Ser Leu Leu
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Gln Gly Pro Gly Arg Gly Cys Gly His Arg Thr Ala Arg Pro Ala Ala
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Ser Gln Gln Asp Ser Met
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<210> 12145
<211> 3680
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (358)..(2448)

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<212> PRT
<213> Homo sapiens

<400> 12146

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Thr Pro Ser Tyr Asn Arg Asp Asn Ser Ile Ser Pro Glu Ser Asp Val
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Asp Thr Ala Ser Thr Ile Ser Leu Val Thr Gly Glu Thr Glu Arg Lys
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Ser Thr Gln Lys Arg Lys Ser Phe Thr Ser Leu Tyr Lys Asp Arg Cys
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Ser Thr Gly Ser Pro Ser Lys Asp Val Thr Lys Ser Ser Ser Ser Gly
                 85                  90                  95
Ala Arg Glu Lys Met Glu Lys Lys Thr Lys Ser Arg Ser Thr Asp Val
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Gly Ser Arg Ala Asp Gly Arg Lys Phe Val Gln Ser Ser Gly Arg Ile
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Arg Gln Pro Ser Val Asp Leu Thr Asp Asp Asp Gln Thr Ser Ser Val
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Pro His Ser Ala Ile Ser Asp Ile Met Ser Ser Asp Gln Glu Thr Tyr
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Val His Ser Lys Leu Glu Gly Ser Lys Val Thr Lys Ser Lys Thr Ser
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225 230 235 240
Val Ser Thr Thr Ser Ser Thr Ser Lys Pro Pro Thr Gly Arg Arg Asn
245 250 255
Ile Ser Arg Ile Asp Leu Leu Ala Gln Pro Arg Arg Thr Arg Leu Gly
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Gly Ser Ala Met Pro Thr Ser Ser Ser Phe Lys His Arg Ile Lys Glu
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Gln Glu Asp Tyr Ile Arg Asp Trp Thr Ala His Arg Glu Glu Ile Ala
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Thr Val Ser Thr Ala Ala Thr Thr Pro Gly Ser Ala Ile Asp Thr Arg
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Pro Asp Gly Thr Leu Glu Ala Leu Asn Asn Met Gly Phe Pro Ser Ala
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Met Leu Pro Ser Pro Pro Lys Gln Lys Ser Ser Pro Val Asn Asn His
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His Ser Pro Gly Gln Thr Pro Thr Leu Gly Gln Pro Glu Ala Arg Ala
                645                 650                 655
Leu His Pro Ala Ala Val Ser Ala Ala Ala Glu Phe Glu Asn Ala Glu
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<213> Homo sapiens

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09/25/2008 09:45:07

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<212> PRT
<213> Homo sapiens

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35 40 45
Leu Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu
50 55 60
Gly Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn

0050450-0400

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                85                  90                  95
Lys Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe
            100                 105                 110
Gln Arg Trp His Leu Asp Glu Val Phe Leu Glu Leu Lys Asp Gly Gln
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Gln Ile Pro Val Phe Lys Leu Ser Gly Glu Asn Gly Asp Glu Val Lys
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<220>
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<222> (786)..(3224)

<400> 12149

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g 3421

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<212> PRT
<213> Homo sapiens

<400> 12150
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35 40 45
Leu Lys Gln Ala Lys Leu Pro His Ala Asn Ile Pro Ser Ala Thr Ser

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Gln Ala Pro Gly Ser Val Leu Phe Gln Ser Pro Phe Ser Thr Val Ala
            100                 105                 110
Leu Asp Thr Ser Lys Lys Gly Lys Gly Lys Pro Pro Asn Ile Ser Ala
        115                 120                 125
Val Asp Val Lys Pro Lys Asp Glu Ala Ala Leu Tyr Lys His Lys Cys
    130                 135                 140
Lys Tyr Cys Ser Lys Val Phe Gly Thr Asp Ser Ser Leu Gln Ile His
145                 150                 155                 160
Leu Arg Ser His Thr Gly Glu Arg Pro Phe Val Cys Ser Val Cys Gly
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His Arg Phe Thr Thr Lys Gly Asn Leu Lys Val His Phe His Arg His
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Pro Gln Val Lys Ala Asn Pro Gln Leu Phe Ala Glu Phe Gln Asp Lys
        195                 200                 205
Val Ala Ala Gly Asn Gly Ile Pro Tyr Ala Leu Ser Val Pro Asp Pro
    210                 215                 220
Ile Asp Glu Pro Ser Leu Ser Leu Asp Ser Lys Pro Val Leu Val Thr
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Thr Ser Val Gly Leu Pro Gln Asn Leu Ser Ser Gly Thr Asn Pro Lys
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Pro Glu Ser Glu Gly Gly Pro Thr Leu Pro Gly Val Gly Pro Asn Tyr
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Asn Ser Pro Arg Ala Gly Gly Phe Gln Gly Ser Gly Thr Pro Glu Pro
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Gly Ser Glu Thr Leu Lys Leu Gln Gln Leu Val Glu Asn Ile Asp Lys
305                 310                 315                 320
Ala Thr Thr Asp Pro Asn Glu Cys Leu Ile Cys His Arg Val Leu Ser
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Cys Gln Ser Ser Leu Lys Met His Tyr Arg Thr His Thr Gly Glu Arg
            340                 345                 350
Pro Phe Gln Cys Lys Ile Cys Gly Arg Ala Phe Ser Thr Lys Gly Asn
        355                 360                 365
Leu Lys Thr His Leu Gly Val His Arg Thr Asn Thr Ser Ile Lys Thr
    370                 375                 380
Gln His Ser Cys Pro Ile Cys Gln Lys Lys Phe Thr Asn Ala Val Met
385                 390                 395                 400
Leu Gln Gln His Ile Arg Met His Met Gly Gly Gln Ile Pro Asn Thr
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Pro Leu Pro Glu Asn Pro Cys Asp Phe Thr Gly Ser Glu Pro Met Thr
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Val Gly Glu Asn Gly Ser Thr Gly Ala Ile Cys His Asp Asp Val Ile
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0950250 .0420000

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Ser Ser Lys Val Pro Thr Pro Leu Pro Ser Ile His Ser Ala Ser Pro
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Thr Leu Gly Phe Ala Met Met Ala Ser Leu Asp Ala Pro Gly Lys Val
                485                 490                 495
Gly Pro Ala Pro Phe Asn Leu Gln Arg Gln Gly Ser Arg Glu Asn Gly
            500                 505                 510
Ser Val Glu Ser Asp Gly Leu Thr Asn Asp Ser Ser Ser Leu Met Gly
        515                 520                 525
Asp Gln Glu Tyr Gln Ser Arg Ser Pro Asp Ile Leu Glu Thr Thr Ser
    530                 535                 540
Phe Gln Ala Leu Ser Pro Ala Asn Ser Gln Ala Glu Ser Ile Lys Ser
545                 550                 555                 560
Lys Ser Pro Asp Ala Gly Ser Lys Ala Glu Ser Ser Glu Asn Ser Arg
                565                 570                 575
Thr Glu Met Glu Gly Arg Ser Ser Leu Pro Ser Thr Phe Ile Arg Ala
            580                 585                 590
Pro Pro Thr Tyr Val Lys Val Glu Val Pro Gly Thr Phe Val Gly Pro
        595                 600                 605
Ser Thr Leu Ser Pro Gly Met Thr Pro Leu Leu Ala Ala Gln Pro Arg
    610                 615                 620
Arg Gln Ala Lys Gln His Gly Cys Thr Arg Cys Gly Lys Asn Phe Ser
625                 630                 635                 640
Ser Ala Ser Ala Leu Gln Ile His Glu Arg Thr His Thr Gly Glu Lys
                645                 650                 655
Pro Phe Val Cys Asn Ile Cys Gly Arg Ala Phe Thr Thr Lys Gly Asn
            660                 665                 670
Leu Lys Val His Tyr Met Thr His Gly Ala Asn Asn Asn Ser Ala Arg
        675                 680                 685
Arg Gly Arg Lys Leu Ala Ile Glu Asn Thr Met Ala Leu Leu Gly Thr
    690                 695                 700
Asp Gly Lys Arg Val Ser Glu Ile Phe Pro Lys Glu Ile Leu Ala Pro
705                 710                 715                 720
Ser Val Asn Val Asp Pro Val Val Trp Asn Gln Tyr Thr Ser Met Leu
                725                 730                 735
Asn Gly Gly Leu Ala Val Lys Thr Asn Glu Ile Ser Val Ile Gln Ser
            740                 745                 750
Gly Gly Val Pro Thr Leu Pro Val Ser Leu Gly Ala Thr Ser Val Val
        755                 760                 765
Asn Asn Ala Thr Val Ser Lys Met Asp Gly Ser Gln Ser Gly Ile Ser
    770                 775                 780
Ala Asp Val Glu Lys Pro Ser Ala Thr Asp Gly Val Pro Lys His Gln
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<210> 12151
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (39)..(1577)

<400> 12151
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<211> 513
<212> PRT
<213> Homo sapiens

<400> 12152

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Glu Thr Thr Val Ser Leu Asn Thr Val Asp Ser Ile Glu Ser Phe Val
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Ala Asp Ile Asn Ser Gly His Trp Asp Thr Val Leu Gln Ala Ile Gln
    50                  55                  60
Ser Leu Lys Leu Pro Asp Lys Thr Leu Ile Asp Leu Tyr Glu Gln Val
65                  70                  75                  80
Val Leu Glu Leu Ile Glu Leu Arg Glu Leu Gly Ala Ala Arg Ser Leu
                85                  90                  95
Leu Arg Gln Thr Asp Pro Met Ile Met Leu Lys Gln Thr Gln Pro Glu
            100                 105                 110
Arg Tyr Ile His Leu Glu Asn Leu Leu Ala Arg Ser Tyr Phe Asp Pro
        115                 120                 125
Arg Glu Ala Tyr Pro Asp Gly Ser Ser Lys Glu Lys Arg Arg Ala Ala
    130                 135                 140
Ile Ala Gln Ala Leu Ala Gly Glu Val Ser Val Val Pro Pro Ser Arg
145                 150                 155                 160
Leu Met Ala Leu Leu Gly Gln Ala Leu Lys Trp Gln Gln His Gln Gly
                165                 170                 175
Leu Leu Pro Pro Gly Met Thr Ile Asp Leu Phe Arg Gly Lys Ala Ala
            180                 185                 190
Val Lys Asp Val Glu Glu Glu Lys Phe Pro Thr Gln Leu Ser Arg His
        195                 200                 205
Ile Lys Phe Gly Gln Lys Ser His Val Glu Cys Ala Arg Phe Ser Pro
    210                 215                 220
Asp Gly Gln Tyr Leu Val Thr Gly Ser Val Asp Gly Phe Ile Glu Val
225                 230                 235                 240
Trp Asn Phe Thr Thr Gly Lys Ile Arg Lys Asp Leu Lys Tyr Gln Ala
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Gln Asp Asn Phe Met Met Met Asp Asp Ala Val Leu Cys Met Cys Phe
            260                 265                 270
Ser Arg Asp Thr Glu Met Leu Ala Thr Gly Ala Gln Asp Gly Lys Ile
        275                 280                 285
Lys Val Trp Lys Ile Gln Ser Gly Gln Cys Leu Arg Arg Phe Glu Arg
    290                 295                 300
Ala His Ser Lys Gly Val Thr Cys Leu Ser Phe Ser Lys Asp Ser Ser
305                 310                 315                 320
Gln Ile Leu Ser Ala Ser Phe Asp Gln Thr Ile Arg Ile His Gly Leu
                325                 330                 335
Lys Ser Gly Lys Thr Leu Lys Glu Phe Arg Gly His Ser Ser Phe Val
            340                 345                 350
Asn Glu Ala Thr Phe Thr Gln Asp Gly His Tyr Ile Ile Ser Ala Ser
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Ser Asp Gly Thr Val Lys Ile Trp Asn Met Lys Thr Thr Glu Cys Ser
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Asn Arg Ser Asn Thr Val Val Ile Met Asn Met Gln Gly Gln Ile Val
            420                 425                 430
Arg Ser Phe Ser Ser Gly Lys Arg Glu Gly Gly Asp Phe Val Cys Cys
        435                 440                 445
Ala Leu Ser Pro Arg Gly Glu Trp Ile Tyr Cys Val Gly Glu Asp Phe
    450                 455                 460
Val Leu Tyr Cys Phe Ser Thr Val Thr Gly Lys Leu Glu Arg Thr Leu
465                 470                 475                 480
Thr Val His Glu Lys Asp Val Ile Gly Ile Ala His His Pro His Gln
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<210> 12153
<211> 1981
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (78)..(1139)

<400> 12153

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<210> 12154
<211> 354
<212> PRT
<213> Homo sapiens

<400> 12154

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			20					25					30		
Leu	Asp	Ala	Leu	His	Arg	Gln	Met	Lys	Leu	Leu	Gly	Glu	Asp	Ser	Pro
		35					40					45			
Val	Ser	Lys	Leu	Gln	Val	Lys	Leu	Glu	Pro	Gly	Val	Asn	Pro	Ser	His
	50					55					60				
Leu	Met	Asn	Leu	Phe	Thr	Tyr	Glu	Lys	Gly	Tyr	Cys	Phe	Val	Tyr	Tyr
65					70					75					80
Leu	Ser	Gln	Leu	Cys	Gly	Asp	Pro	Gln	Arg	Phe	Asp	Asp	Phe	Leu	Arg
				85					90					95	
Ala	Tyr	Val	Glu	Lys	Tyr	Lys	Phe	Thr	Ser	Val	Val	Ala	Gln	Asp	Leu
			100					105					110		
Leu	Asp	Ser	Phe	Leu	Ser	Phe	Phe	Pro	Glu	Leu	Lys	Glu	Gln	Ser	Val
		115					120					125			
Asp	Cys	Arg	Ala	Gly	Leu	Glu	Phe	Glu	Arg	Trp	Leu	Asn	Ala	Thr	Gly
	130					135					140				
Pro	Pro	Leu	Ala	Glu	Pro	Asp	Leu	Ser	Gln	Gly	Ser	Ser	Leu	Thr	Arg
145					150					155					160
Pro	Val	Glu	Ala	Leu	Phe	Gln	Leu	Trp	Thr	Ala	Glu	Pro	Leu	Asp	Gln
				165					170					175	
Ala	Ala	Ala	Ser	Ala	Ser	Ala	Ile	Asp	Ile	Ser	Lys	Trp	Arg	Thr	Phe
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09/15/2004 09:50:03

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Gln Thr Ala Leu Phe Leu Asp Arg Leu Leu Asp Gly Ser Pro Leu Pro
        195                 200                 205
Gln Glu Val Val Met Ser Leu Ser Lys Cys Tyr Ser Ser Leu Leu Asp
    210                 215                 220
Ser Met Asn Ala Glu Ile Arg Ile Arg Trp Leu Gln Ile Glu Val Arg
225                 230                 235                 240
Asn Asp Tyr Tyr Pro Asp Leu His Arg Val Arg Arg Phe Leu Glu Ser
                245                 250                 255
Gln Met Ser Arg Met Tyr Thr Ile Pro Leu Tyr Glu Asp Leu Cys Thr
            260                 265                 270
Gly Ala Leu Lys Ser Phe Ala Leu Glu Val Phe Tyr Gln Thr Gln Gly
        275                 280                 285
Arg Leu His Pro Asn Leu Arg Arg Ala Ile Gln Gln Ile Leu Ser Gln
    290                 295                 300
Gly Leu Gly Ser Ser Thr Glu Pro Ala Ser Glu Pro Ser Thr Glu Leu
305                 310                 315                 320
Gly Lys Ala Glu Ala Asp Thr Asp Ser Asp Ala Gln Ala Leu Leu Leu
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Gly Asp Glu Ala Pro Ser Ser Ala Ile Ser Leu Arg Asp Val Asn Val
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<210> 12155
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<212> DNA
<213> Homo sapiens

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<221> CDS
<222> (382)..(714)

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<211> 111
<212> PRT
<213> Homo sapiens

<400> 12156

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			20					25				30			
Tyr	Cys	Pro	Lys	Ser	Leu	Gln	Arg	His	Glu	Lys	Thr	His	Thr	Gly	Glu
		35					40					45			
Lys	Leu	Tyr	Glu	Cys	Lys	Gln	Cys	Gly	Glu	Ala	Phe	Ser	Ser	Ser	Ser
	50					55					60				
Ser	Phe	Arg	Tyr	His	Glu	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys
65					70					75					80
Cys	Lys	Gln	Cys	Gly	Lys	Ala	Phe	Arg	Ala	Ala	Ser	Val	Leu	Arg	Met
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<210> 12157
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
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05050.0500

0050450-0050

<400> 12157

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<210> 12158
<211> 154
<212> PRT
<213> Homo sapiens

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Pro Ala Leu Glu Trp Cys Val Ala Val Tyr Ala Ile Cys Phe Ile Leu
35 40 45
Ala Ala Ile Ala Ile Leu Leu Asn Leu Gly Glu Cys Thr Asn Val Leu
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Pro Ile Pro Phe Pro Ser Phe Leu Ser Gly Leu Ala Leu Leu Ser Val
65 70 75 80
Leu Leu Tyr Ala Thr Ala Leu Val Leu Trp Pro Leu Tyr Gln Phe Asp
85 90 95
Glu Lys Tyr Gly Gly Gln Pro Arg Arg Ser Arg Asp Val Ser Cys Ser
100 105 110
Arg Ser His Ala Tyr Tyr Val Cys Ala Trp Asp Arg Arg Leu Ala Val
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Ala Ile Leu Thr Ala Ile Asn Leu Leu Ala Tyr Val Ala Asp Leu Val
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His Ser Ala His Leu Val Phe Val Lys Val
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<210> 12159
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<212> DNA
<213> Homo sapiens

<220>
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<222> (181)..(1557)

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<212> PRT
<213> Homo sapiens

<400> 12160
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Lys Phe Trp Gln Thr Tyr Ser Ser Ala Glu Glu Val Leu Gln Lys Ile
65                  70                  75                  80
Gln Ser Gly His Ser Leu Glu Gly Cys Phe Gln Val Ile Lys Leu Leu
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Ser Arg Arg Pro Arg Asn Trp Ser Gln Cys Val Glu Leu Ala Arg Leu
            100                 105                 110
Lys Phe Glu Lys Tyr Phe Asn His Lys Ala Leu Gln Leu Leu His Cys
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Phe Pro Leu Asp Ile Arg Leu Lys Asp Gly Ser Leu Phe Trp Gln Ser
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Pro Lys Arg Pro Pro Ser Pro Ile Lys Phe Asp Leu Asn Glu Pro Leu
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His Leu Ser Phe Leu Gln Asn Ala Ala Lys Leu Tyr Ala Thr Val Tyr
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Cys Ile Pro Phe Ala Glu Glu Asp Leu Ser Ala Asp Ala Leu Leu Asn
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Ile Leu Ser Glu Val Lys Ile Gln Glu Phe Lys Pro Ser Asn Lys Val
        195                 200                 205
Val His Thr Asp Glu Thr Ala Arg Lys Pro Asp His Val Pro Ile Ser
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Ser Glu Asp Glu Arg Asn Ala Ile Phe Gln Leu Glu Lys Ala Ile Leu
225                 230                 235                 240
Ser Asn Glu Ala Thr Lys Ser Asp Leu Gln Met Ala Val Leu Ser Phe
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Glu Lys Asp Asp Asp His Asn Gly His Ile Asp Phe Ile Thr Ala Ala
            260                 265                 270
Ser Asn Leu Arg Ala Lys Met Tyr Ser Ile Glu Pro Ala Asp Arg Phe
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Lys Thr Lys Arg Ile Ala Gly Lys Ile Ile Pro Ala Ile Ala Thr Thr
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Thr Ala Thr Val Ser Gly Leu Val Ala Leu Glu Met Ile Lys Val Thr
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Gly Gly Tyr Pro Phe Glu Ala Tyr Lys Asn Cys Phe Leu Asn Leu Ala
                325                 330                 335
Ile Pro Ile Val Val Phe Thr Glu Thr Thr Glu Val Arg Lys Thr Lys
            340                 345                 350
Ile Arg Asn Gly Ile Ser Phe Thr Ile Trp Asp Arg Trp Thr Val His
        355                 360                 365
Gly Lys Glu Asp Phe Thr Leu Leu Asp Phe Ile Asn Ala Val Lys Glu
    370                 375                 380
Lys Tyr Gly Ile Glu Pro Thr Met Val Val Gln Gly Val Lys Met Leu
385                 390                 395                 400
Tyr Val Pro Val Met Pro Gly His Ala Lys Arg Leu Lys Leu Thr Met
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His Lys Leu Val Lys Pro Thr Thr Glu Lys Lys Tyr Val Asp Leu Thr
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<213> Homo sapiens

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<222> (24)..(1892)

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<212> PRT
<213> Homo sapiens

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35 40 45
Ile Pro Ser Asp Leu Lys Asn Leu Leu Lys Val Glu Arg Ile Tyr Leu
50 55 60
Tyr His Asn Ser Leu Asp Glu Phe Pro Thr Asn Leu Pro Lys Tyr Val
65 70 75 80
Lys Glu Leu His Leu Gln Glu Asn Asn Ile Arg Thr Ile Thr Tyr Asp
85 90 95
Ser Leu Ser Lys Ile Pro Tyr Leu Glu Glu Leu His Leu Asp Asp Asn
100 105 110
Ser Val Ser Ala Val Ser Ile Glu Glu Gly Ala Phe Arg Asp Ser Asn
115 120 125
Tyr Leu Arg Leu Leu Phe Leu Ser Arg Asn His Leu Ser Thr Ile Pro
130 135 140
Trp Gly Leu Pro Arg Thr Ile Glu Glu Leu Arg Leu Asp Asp Asn Arg
145 150 155 160
Ile Ser Thr Ile Ser Ser Pro Ser Leu Gln Gly Leu Thr Ser Leu Lys
165 170 175
Arg Leu Val Leu Asp Gly Asn Leu Leu Asn Asn His Gly Leu Gly Asp
180 185 190
Lys Val Phe Phe Asn Leu Val Asn Leu Thr Glu Leu Ser Leu Val Arg
195 200 205
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210 215 220

Lys Leu Tyr Leu Gln Asp Asn His Ile Asn Arg Val Pro Pro Asn Ala
225 230 235 240
Phe Ser Tyr Leu Arg Gln Leu Tyr Arg Leu Asp Met Ser Asn Asn Asn
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Leu Ser Asn Leu Pro Gln Gly Ile Phe Asp Asp Leu Asp Asn Ile Thr
260 265 270
Gln Leu Ile Leu Arg Asn Asn Pro Trp Tyr Cys Gly Cys Lys Met Lys
275 280 285
Trp Val Arg Asp Trp Leu Gln Ser Leu Pro Val Lys Val Asn Val Arg
290 295 300
Gly Leu Met Cys Gln Ala Pro Glu Lys Val Arg Gly Met Ala Ile Lys
305 310 315 320
Asp Leu Asn Ala Glu Leu Phe Asp Cys Lys Asp Ser Gly Ile Val Ser
325 330 335
Thr Ile Gln Ile Thr Thr Ala Ile Pro Asn Thr Val Tyr Pro Ala Gln
340 345 350
Gly Gln Trp Pro Ala Pro Val Thr Lys Gln Pro Asp Ile Lys Asn Pro
355 360 365
Lys Leu Thr Lys Asp His Gln Thr Thr Gly Ser Pro Ser Arg Lys Thr
370 375 380
Ile Thr Ile Thr Val Lys Ser Val Thr Ser Asp Thr Ile His Ile Ser
385 390 395 400
Trp Lys Leu Ala Leu Pro Met Thr Ala Leu Arg Leu Ser Trp Leu Lys
405 410 415
Leu Gly His Ser Pro Ala Phe Gly Ser Ile Thr Glu Thr Ile Val Thr
420 425 430
Gly Glu Arg Ser Glu Tyr Leu Val Thr Ala Leu Glu Pro Asp Ser Pro
435 440 445
Tyr Lys Val Cys Met Val Pro Met Glu Thr Ser Asn Leu Tyr Leu Phe
450 455 460
Asp Glu Thr Pro Val Cys Ile Glu Thr Glu Thr Ala Pro Leu Arg Met
465 470 475 480
Tyr Asn Pro Thr Thr Thr Leu Asn Arg Glu Gln Glu Lys Glu Pro Tyr
485 490 495
Lys Asn Pro Asn Leu Pro Leu Ala Ala Ile Ile Gly Gly Ala Val Ala
500 505 510
Leu Val Thr Ile Ala Leu Leu Ala Leu Val Cys Trp Tyr Val His Arg
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530 535 540
Arg Lys Asp Asp Tyr Ala Glu Ala Gly Thr Lys Lys Asp Asn Ser Ile
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Leu Glu Ile Arg Glu Thr Ser Phe Gln Met Leu Pro Ile Ser Asn Glu
565 570 575
Pro Ile Ser Lys Glu Glu Phe Val Ile His Thr Ile Phe Pro Pro Asn
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<211> 954
<212> PRT
<213> Homo sapiens

<400> 12164

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         35                  40                  45
Phe Ser Tyr Gln Leu Glu Ala Leu Lys Ser Lys Tyr Val Leu Leu Asn
     50                  55                  60
Pro Lys Thr Glu Gly Ala Ser Arg His Lys Ser Gly Asp Asp Pro Pro
 65                  70                  75                  80
Ala Arg Arg Gln Gly Ser Glu His Thr Tyr Glu Ser Cys Gly Asp Gly
                 85                  90                  95
Val Pro Ala Pro Gln Lys Val Leu Phe Pro Thr Glu Arg Leu Ser Leu
            100                 105                 110
Arg Trp Glu Arg Val Phe Arg Val Gly Ala Gly Leu His Asn Leu Gly
        115                 120                 125
Asn Thr Cys Phe Leu Asn Ala Thr Ile Gln Cys Leu Thr Tyr Thr Pro
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225                 230                 235                 240
Val His Gln Ile Phe Gly Gly Tyr Leu Arg Ser Arg Val Lys Cys Ser
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Val Cys Lys Ser Val Ser Asp Thr Tyr Asp Pro Tyr Leu Asp Val Ala
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        275                 280                 285
Val Lys Ala Asp Val Leu Ser Gly Glu Asn Ala Tyr Met Cys Ala Lys
    290                 295                 300
Cys Lys Lys Lys Val Pro Ala Ser Lys Arg Phe Thr Ile His Arg Thr
305                 310                 315                 320
Ser Asn Val Leu Thr Leu Ser Leu Lys Arg Phe Ala Asn Phe Ser Gly
                325                 330                 335
Gly Lys Ile Thr Lys Asp Val Gly Tyr Pro Glu Phe Leu Asn Ile Arg
            340                 345                 350
Pro Tyr Met Ser Gln Asn Asn Gly Asp Pro Val Met Tyr Gly Leu Tyr
        355                 360                 365
Ala Val Leu Val His Ser Gly Tyr Ser Cys His Ala Gly His Tyr Tyr
    370                 375                 380
Cys Tyr Val Lys Ala Ser Asn Gly Gln Trp Tyr Gln Met Asn Asp Ser
385                 390                 395                 400
Leu Val His Ser Ser Asn Val Lys Val Val Leu Asn Gln Gln Ala Tyr
                405                 410                 415
Val Leu Phe Tyr Leu Arg Ile Pro Gly Ser Lys Lys Ser Pro Glu Gly
            420                 425                 430
Leu Ile Ser Arg Thr Gly Ser Ser Ser Leu Pro Gly Arg Pro Ser Val
        435                 440                 445
Ile Pro Asp His Ser Lys Lys Asn Ile Gly Asn Gly Ile Ile Ser Ser
    450                 455                 460
Pro Leu Thr Gly Lys Arg Gln Asp Ser Gly Thr Met Lys Lys Pro His
465                 470                 475                 480
Thr Thr Glu Glu Ile Gly Val Pro Ile Ser Arg Asn Gly Ser Thr Leu
                485                 490                 495
Gly Leu Lys Ser Gln Asn Gly Cys Ile Pro Pro Lys Leu Pro Ser Gly
            500                 505                 510
Ser Pro Ser Pro Lys Leu Ser Gln Thr Pro Thr His Met Pro Thr Ile
        515                 520                 525
Leu Asp Asp Pro Gly Lys Lys Val Lys Lys Pro Ala Pro Pro Gln His
    530                 535                 540
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Phe Ser Pro Arg Thr Ala Gln Gly Leu Pro Gly Thr Ser Asn Ser Asn
545 550 555 560
Ser Ser Arg Ser Gly Ser Gln Arg Gln Gly Ser Trp Gly Ser Arg Asp
565 570 575
Val Val Leu Ser Thr Ser Pro Lys Leu Leu Ala Thr Ala Thr Ala Asn
580 585 590
Gly His Gly Leu Lys Gly Asn Asp Glu Ser Ala Gly Leu Asp Arg Arg
595 600 605
Gly Ser Ser Ser Ser Ser Pro Glu His Ser Ala Ser Ser Asp Ser Thr
610 615 620
Lys Ala Pro Gln Thr Pro Arg Ser Gly Ala Ala His Leu Cys Asp Ser
625 630 635 640
Gln Glu Thr Asn Cys Ser Thr Ala Gly His Ser Lys Thr Pro Pro Ser
645 650 655
Gly Ala Asp Ser Lys Thr Val Lys Leu Lys Ser Pro Val Leu Ser Asn
660 665 670
Thr Thr Thr Glu Pro Ala Ser Thr Met Ser Pro Pro Pro Ala Lys Lys
675 680 685
Leu Ala Leu Ser Ala Lys Lys Ala Ser Thr Leu Trp Arg Ala Thr Gly
690 695 700
Asn Asp Leu Arg Pro Pro Pro Pro Ser Pro Ser Ser Asp Leu Thr His
705 710 715 720
Pro Met Lys Thr Ser His Pro Val Val Ala Ser Thr Trp Pro Val His
725 730 735
Arg Ala Arg Ala Val Ser Pro Ala Pro Gln Ser Ser Ser Arg Leu Gln
740 745 750
Pro Pro Phe Ser Pro His Pro Thr Leu Leu Ser Ser Thr Pro Lys Pro
755 760 765
Pro Gly Thr Ser Glu Pro Arg Ser Cys Ser Ser Ile Ser Thr Ala Leu
770 775 780
Pro Gln Val Asn Glu Asp Leu Val Ser Leu Pro His Gln Leu Pro Glu
785 790 795 800
Ala Ser Glu Pro Pro Arg Ser Pro Ser Glu Lys Arg Lys Lys Thr Phe
805 810 815
Val Gly Glu Pro Gln Arg Leu Gly Ser Glu Thr Cys Leu Pro Gln His
820 825 830
Ile Arg Glu Ala Thr Ala Ala Pro His Gly Lys Arg Lys Arg Lys Lys
835 840 845
Lys Lys Arg Pro Glu Asp Thr Ala Ala Ser Ala Leu Gln Glu Gly Gln
850 855 860
Thr Gln Arg Gln Pro Gly Ser Pro Met Tyr Arg Arg Glu Gly Gln Ala
865 870 875 880
Gln Leu Pro Ala Val Arg Arg Gln Glu Asp Gly Thr Gln Pro Gln Val
885 890 895
Asn Gly Gln Gln Val Gly Cys Val Thr Asp Gly His His Ala Ser Ser
900 905 910
Arg Lys Arg Arg Arg Lys Gly Ala Glu Gly Leu Gly Glu Glu Gly Gly
915 920 925

0050050-0050050

Leu His Gln Asp Pro Leu Arg His Ser Cys Ser Pro Met Gly Asp Gly
930 935 940
Asp Pro Glu Ala Met Glu Glu Ser Pro Arg
945 950

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<211> 2491
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (40)..(1374)

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gatggagaga ctgcatcgga cagtgagagc cgggcagaat ccgcacccct gccagtctct 180
gcagatgata ccccggaggt cctcaatagg gccctttcca acttgtcttc aagatggaag 240
aactggtggg tgagaggcat cctgactttg gccatgattg cattttctt catcatcatt 300
tacctgggac caatggtttt gatgataatc gtgatgtgcg ttcagattaa gtgtttccat 360
gagataatca ctattggcta caacgtctac cactcatatg atctgccctg gttcaggacg 420
ctcagctggt actttctcct gtgtgtaaac tatttcttct atggtgagac agtgacggat 480
tacttcttca ccctggtcca gagagaagag cctttgcgga ttctcagtaa ataccaccgg 540
ttcatttcct ttactctcta tctaatagga ttctgcatgt ttgtactgag tctggtcaag 600
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<211> 445
<212> PRT
<213> Homo sapiens

<400> 12166
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Ser Asp Ser Glu Ser Arg Ala Glu Ser Ala Pro Leu Pro Val Ser Ala
35 40 45
Asp Asp Thr Pro Glu Val Leu Asn Arg Ala Leu Ser Asn Leu Ser Ser
50 55 60
Arg Trp Lys Asn Trp Trp Val Arg Gly Ile Leu Thr Leu Ala Met Ile
65 70 75 80
Ala Phe Phe Phe Ile Ile Ile Tyr Leu Gly Pro Met Val Leu Met Ile
85 90 95
Ile Val Met Cys Val Gln Ile Lys Cys Phe His Glu Ile Ile Thr Ile
100 105 110
Gly Tyr Asn Val Tyr His Ser Tyr Asp Leu Pro Trp Phe Arg Thr Leu
115 120 125
Ser Trp Tyr Phe Leu Leu Cys Val Asn Tyr Phe Phe Tyr Gly Glu Thr
130 135 140
Val Thr Asp Tyr Phe Phe Thr Leu Val Gln Arg Glu Glu Pro Leu Arg
145 150 155 160
Ile Leu Ser Lys Tyr His Arg Phe Ile Ser Phe Thr Leu Tyr Leu Ile
165 170 175
Gly Phe Cys Met Phe Val Leu Ser Leu Val Lys Lys His Tyr Arg Leu
180 185 190
Gln Phe Tyr Met Phe Gly Trp Thr His Val Thr Leu Leu Ile Val Val
195 200 205
Thr Gln Ser His Leu Val Ile His Asn Leu Phe Glu Gly Met Ile Trp
210 215 220
Phe Ile Val Pro Ile Ser Cys Val Ile Cys Asn Asp Ile Met Ala Tyr
225 230 235 240

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Met Phe Gly Phe Phe Phe Gly Arg Thr Pro Leu Ile Lys Leu Ser Pro
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Lys Lys Thr Trp Glu Gly Phe Ile Gly Gly Phe Phe Ala Thr Val Val
            260                 265                 270
Phe Gly Leu Leu Leu Ser Tyr Val Met Ser Gly Tyr Arg Cys Phe Val
        275                 280                 285
Cys Pro Val Glu Tyr Asn Asn Asp Thr Asn Ser Phe Thr Val Asp Cys
    290                 295                 300
Glu Pro Ser Asp Leu Phe Arg Leu Gln Glu Tyr Asn Ile Pro Gly Val
305                 310                 315                 320
Ile Gln Ser Val Ile Gly Trp Lys Thr Val Arg Met Tyr Pro Ser Gln
                325                 330                 335
Ile His Ser Ile Ala Leu Ser Thr Phe Ala Ser Leu Ile Gly Pro Phe
            340                 345                 350
Gly Gly Phe Phe Ala Ser Gly Phe Lys Arg Ala Phe Lys Ile Lys Asp
        355                 360                 365
Phe Ala Asn Thr Ile Pro Gly His Gly Gly Ile Met Asp Arg Phe Asp
    370                 375                 380
Cys Gln Tyr Leu Met Ala Thr Phe Val Asn Val Tyr Ile Ala Ser Phe
385                 390                 395                 400
Ile Arg Gly Pro Asn Pro Ser Lys Leu Ile Gln Gln Phe Leu Thr Leu
                405                 410                 415
Arg Pro Asp Gln Gln Leu His Ile Phe Asn Thr Leu Arg Ser His Leu
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<210> 12167
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<213> Homo sapiens

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<222> (701)..(3046)

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gaatttagtt ggagagaaca atcatgatgt tgataacagt gacctcccag tattgtccac 180
tgatcaagat gaaagtttgc tgttatttga agatgttaat acagagttcg acgatgtgag 240
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tacatcagat agcaatagac ctctagatga tctatatgga aggtatttgg aaattaagga 600

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<210> 12168
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<212> PRT
<213> Homo sapiens

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<400> 12168

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            20                  25                  30
Lys Lys Val Met Ser Thr Pro Leu Ser Lys Ser Asn Thr Leu Asn Ser
        35                  40                  45
Phe Ser Lys Ile Arg Lys Glu Ile Leu Lys Thr Pro Asp Ser Gly Lys
    50                  55                  60
Glu Lys Val Asn Leu Gln Arg Phe Lys Glu Ala Leu Asn Ser Thr Phe
65                  70                  75                  80
Asp Tyr Ser Glu Phe Ser Leu Glu Lys Ser Lys Ser Ser Gly Pro Met
                85                  90                  95
Tyr Leu His Lys Ser Cys His Ser Val Glu Asp Gly Gln Leu Leu Thr
            100                 105                 110
Ser Asn Glu Ser Glu Asp Asp Glu Ile Phe Arg Arg Lys Val Lys Arg
        115                 120                 125
Ala Lys Gly Asn Val Leu Asn Ser Pro Glu Asp Gln Lys Asn Ser Glu
    130                 135                 140
Val Asp Ser Pro Leu His Ala Val Lys Lys Arg Arg Phe Pro Ile Asn
145                 150                 155                 160
Arg Ser Glu Leu Ser Ser Ser Asp Glu Ser Glu Asn Phe Pro Lys Pro
                165                 170                 175
Cys Ser Gln Leu Glu Asp Phe Lys Val Cys Asn Gly Asn Ala Arg Arg
            180                 185                 190
Gly Ile Lys Val Pro Lys Arg Gln Ser His Leu Lys His Val Ala Arg
        195                 200                 205
Lys Phe Leu Asp Asp Glu Ala Glu Leu Ser Glu Glu Asp Ala Glu Tyr
    210                 215                 220
Val Ser Ser Asp Glu Asn Asp Glu Ser Glu Asn Glu Gln Asp Ser Ser
225                 230                 235                 240
Leu Leu Asp Phe Leu Asn Asp Glu Thr Gln Leu Ser Gln Ala Ile Asn
                245                 250                 255
Asp Ser Glu Met Arg Ala Ile Tyr Met Lys Ser Leu Arg Ser Pro Met
            260                 265                 270
Met Asn Asn Lys Tyr Lys Met Ile His Lys Thr His Lys Asn Ile Asn
        275                 280                 285
Ile Phe Ser Gln Ile Pro Glu Gln Asp Glu Thr Tyr Leu Glu Asp Ser
    290                 295                 300
Phe Cys Val Asp Glu Glu Glu Ser Cys Lys Gly Gln Ser Ser Glu Glu
305                 310                 315                 320
Glu Val Cys Val Asp Phe Asn Leu Ile Thr Asp Asp Cys Phe Ala Asn
                325                 330                 335
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Glu Gln Asn Cys Ala His Ser Lys Lys Lys Leu Ser Arg Ile Ile Leu
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0050345

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Asp His Cys Leu Asn Ser Val Pro Ser Gly Ser Ser Ala Gln Ser Lys
                405                 410                 415
Val Arg Ser Thr Pro Arg Val Asn Pro Leu Ala Lys Gln Ser Lys Gln
            420                 425                 430
Thr Leu Leu Asn Leu Lys Asp Thr Ile Ser Glu Val Ser Asp Phe Lys
        435                 440                 445
Pro Gln Asn His Asn Glu Val Gln Ser Thr Thr Pro Pro Phe Thr Thr
    450                 455                 460
Val Asp Ser Gln Lys Asp Cys Arg Lys Phe Pro Val Pro Gln Lys Arg
465                 470                 475                 480
Phe Gly His Leu Ala Leu Met Phe Pro Met Pro Ser Ala Ser Ala Lys
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Arg Gly Ala His Gly Pro Gln Asp Leu Ala Asp Tyr Phe Gly Lys Glu
            500                 505                 510
Ser Trp Asp Gly Ser Ala Leu Glu Asp Ser Ser Thr Ser Gly Ala Ser
        515                 520                 525
Cys Ser Lys Ser Arg Pro His Leu Ala Gly Thr His Thr Ser Leu Arg
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Leu Pro Gln Glu Gly Lys Gly Thr Cys Ile Leu Val Gly Gly His Glu
545                 550                 555                 560
Ile Thr Ser Gly Leu Glu Val Ile Ser Ser Leu Arg Ala Ile His Gly
                565                 570                 575
Leu Gln Val Glu Val Cys Pro Leu Asn Gly Cys Asp Tyr Ile Val Ser
            580                 585                 590
Asn Arg Met Val Val Glu Arg Arg Ser Gln Ser Glu Met Leu Asn Ser
        595                 600                 605
Val Asn Lys Asn Lys Phe Ile Glu Gln Ile Gln His Leu Gln Ser Met
    610                 615                 620
Phe Glu Arg Ile Cys Val Ile Val Glu Lys Asp Arg Glu Lys Thr Gly
625                 630                 635                 640
Asp Thr Ser Arg Met Phe Arg Arg Thr Lys Ser Tyr Asp Ser Leu Leu
                645                 650                 655
Thr Thr Leu Ile Gly Ala Gly Ile Arg Ile Leu Phe Ser Ser Cys Gln
            660                 665                 670
Glu Glu Thr Ala Asp Leu Leu Lys Glu Leu Ser Leu Val Glu Gln Arg
        675                 680                 685
Lys Asn Val Gly Ile His Val Pro Thr Val Val Asn Ser Asn Lys Ser
    690                 695                 700
Glu Ala Leu Gln Phe Tyr Leu Ser Ile Pro Asn Ile Ser Tyr Ile Thr
705                 710                 715                 720
Ala Leu Asn Met Cys His Gln Phe Ser Ser Val Lys Arg Met Ala Asn
                725                 730                 735
Ser Ser Leu Gln Glu Ile Ser Met Tyr Ala Gln Val Thr His Gln Lys
            740                 745                 750
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Ala Glu Glu Ile Tyr Arg Tyr Ile His Tyr Val Phe Asp Ile Gln Met
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<220>
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<211> 651
<212> PRT
<213> Homo sapiens

<400> 12174
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35 40 45
Phe Ser Gln Gly Ser Gly Ser Glu Glu Glu Glu Ala Ala Gly Thr Glu
50 55 60
Gly Asp Ala Gln Asp Trp Pro Gly Ala Gly Ser Ser Ala Asp Gln Asp

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Asp Glu Glu Gly Val Val Lys Phe Gln Pro Ser Leu Trp Pro Trp Asp
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Ser Val Arg Asn Asn Leu Arg Ser Ala Leu Thr Glu Met Cys Val Leu
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Tyr Asp Val Leu Ser Ile Val Arg Asp Lys Lys Phe Met Thr Leu Asp
        115                 120                 125
Pro Val Ser Gln Asp Ala Leu Pro Pro Lys Gln Asn Pro Gln Thr Leu
    130                 135                 140
Gln Leu Ile Ser Lys Lys Lys Ser Leu Ala Gly Ala Ala Gln Ile Leu
145                 150                 155                 160
Leu Lys Gly Ala Glu Arg Leu Thr Lys Ser Val Thr Glu Asn Gln Glu
                165                 170                 175
Asn Lys Leu Gln Arg Asp Phe Asn Ser Glu Leu Leu Arg Leu Arg Gln
            180                 185                 190
His Trp Lys Leu Arg Lys Val Gly Asp Lys Ile Leu Gly Asp Leu Ser
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Tyr Arg Ser Ala Gly Ser Leu Phe Pro His His Gly Thr Phe Glu Val
    210                 215                 220
Ile Lys Asn Thr Asp Leu Asp Leu Asp Lys Lys Ile Pro Glu Asp Tyr
225                 230                 235                 240
Cys Pro Leu Asp Val Gln Ile Pro Ser Asp Leu Glu Gly Ser Ala Tyr
                245                 250                 255
Ile Lys Val Ser Ile Gln Lys Gln Ala Pro Asp Ile Gly Asp Leu Gly
            260                 265                 270
Thr Val Asn Leu Phe Lys Arg Pro Leu Pro Lys Ser Lys Pro Gly Ser
        275                 280                 285
Pro His Trp Gln Thr Lys Leu Glu Ala Ala Gln Asn Val Leu Leu Cys
    290                 295                 300
Lys Glu Ile Phe Ala Gln Leu Ser Arg Glu Ala Val Gln Ile Lys Ser
305                 310                 315                 320
Gln Val Pro His Ile Val Val Lys Asn Gln Ile Ile Ser Gln Pro Phe
                325                 330                 335
Pro Ser Leu Gln Leu Ser Ile Ser Leu Cys His Ser Ser Asn Asp Lys
            340                 345                 350
Lys Ser Gln Lys Phe Ala Thr Glu Lys Gln Cys Pro Glu Asp His Leu
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Tyr Val Leu Glu His Asn Leu His Leu Leu Ile Arg Glu Phe His Lys
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Gln Thr Leu Ser Ser Ile Met Met Pro His Pro Ala Ser Ala Pro Phe
385                 390                 395                 400
Gly His Lys Arg Met Arg Leu Ser Gly Pro Gln Ala Phe Asp Lys Asn
                405                 410                 415
Glu Ile Asn Ser Leu Gln Ser Ser Glu Gly Leu Leu Glu Lys Ile Ile
            420                 425                 430
Lys Gln Ala Lys His Ile Phe Leu Arg Ser Arg Ala Ala Ala Thr Ile
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Asp Ser Leu Ala Ser Arg Ile Glu Asp Pro Gln Ile Gln Ala His Trp
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0005345 0 = 9/2/00

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Ser Gln Gly Tyr Glu Gln Ile Cys Lys Ser Ile Gln Leu Gln Leu Asn
                485                 490                 495
Ile Gly Val Glu Gln Ile Arg Val Val His Arg Asp Gly Arg Val Ile
            500                 505                 510
Thr Leu Ser Tyr Gln Glu Gln Glu Leu Gln Asp Phe Leu Leu Ser Gln
        515                 520                 525
Met Ser Gln His Gln Val His Ala Val Gln Gln Leu Ala Lys Val Met
    530                 535                 540
Gly Trp Gln Val Leu Ser Phe Ser Asn His Val Gly Leu Gly Pro Ile
545                 550                 555                 560
Glu Ser Ile Gly Asn Ala Ser Ala Ile Thr Val Ala Ser Pro Ser Gly
                565                 570                 575
Asp Tyr Ala Ile Ser Val Arg Asn Gly Pro Glu Ser Gly Ser Lys Ile
            580                 585                 590
Met Val Gln Phe Pro Arg Asn Gln Cys Lys Asp Leu Pro Lys Ser Asp
        595                 600                 605
Val Leu Gln Asp Asn Lys Trp Ser His Leu Arg Gly Pro Phe Lys Glu
    610                 615                 620
Val Gln Trp Asn Lys Met Glu Gly Arg Asn Phe Val Tyr Lys Met Glu
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (273)..(1742)

<400> 12175

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<210> 12176
<211> 490
<212> PRT
<213> Homo sapiens

<400> 12176

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35 40 45
Gly Pro Phe Leu Lys Ala Leu Leu Phe Glu Leu Arg Leu Leu Asp Asp
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Asp Lys Asp Phe Val Glu Ser Arg Asp Ser Cys Ser Arg Ile Asn Lys
65 70 75 80
Thr Ser Ile Tyr Gly Leu Leu Ile Gly Gly Glu Glu Leu Trp Pro Val
85 90 95
Val Ala Phe Leu Lys Asn Asp Met Ile Tyr Ala Cys Val Pro Leu Val
100 105 110
Glu Gln Thr Leu Ser Pro Arg Pro Pro Leu Ile Ser Val Ser Gly Val
115 120 125
Ser Gln Gly Phe Glu Phe Leu Phe Gly Ile Gln Asp Phe Leu Tyr Ser
130 135 140
Gly Gln Lys Asn Asp Ser Glu Leu Asn Thr Lys Leu Ser Gln Leu Pro
145 150 155 160
Asp Leu Leu Leu Gln Ala Cys Pro Phe Gly Thr Leu Leu Asp Ala Asn
165 170 175
Leu Gln Asn Ser Leu Asp Asn Thr Asn Phe Ala Ser Val Thr Gln Pro
180 185 190
Gln Lys Gln Pro Ala Trp Lys Thr Gly Thr Tyr Lys Gly Lys Pro Gln
195 200 205
Val Ser Ile Ser Ile Thr Glu Lys Val Lys Ser Met Gln Tyr Asp Lys
210 215 220
Gln Gly Ile Ala Asp Thr Trp Gln Val Val Gly Thr Val Thr Cys Lys
225 230 235 240
Cys Asp Leu Glu Gly Ile Met Pro Asn Val Thr Ile Ser Leu Ser Leu
245 250 255
Pro Thr Asn Gly Ser Pro Leu Gln Asp Ile Leu Val His Pro Cys Val
260 265 270
Thr Ser Leu Asp Ser Ala Ile Leu Thr Ser Ser Ser Ile Asp Ala Met
275 280 285
Asp Asp Ser Ala Phe Ser Gly Pro Tyr Lys Phe Pro Phe Thr Pro Pro
290 295 300
Leu Glu Ser Phe Asn Leu Cys Phe Tyr Thr Ser Gln Val Pro Val Pro
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Pro Ile Leu Gly Phe Tyr Gln Met Lys Glu Glu Glu Val Gln Leu Arg
325 330 335
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340 345 350
Phe Cys Glu Ala His Ile Pro Phe Tyr Asn Arg Gly Pro Ile Thr His
355 360 365
Leu Glu Tyr Lys Thr Ser Phe Gly Gln Leu Glu Val Phe Arg Glu Lys
370 375 380
Ser Leu Leu Ile Trp Ile Ile Gly Gln Lys Phe Pro Lys Ser Met Glu
385 390 395 400

0050450 - 0050450

Ile Ser Leu Ser Gly Thr Val Thr Phe Gly Ala Lys Ser His Glu Lys
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Gln Pro Phe Asp Pro Ile Cys Thr Gly Glu Thr Ala Tyr Leu Lys Leu
420 425 430
His Phe Arg Ile Leu Asp Tyr Thr Leu Thr Gly Cys Tyr Ala Asp Gln
435 440 445
His Ser Val Gln Val Phe Ala Ser Gly Lys Pro Lys Ile Ser Ala His
450 455 460
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0502316.0-US-NP

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (93)..(3560)

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09052600-050905

<210> 12178
<211> 1156
<212> PRT
<213> Homo sapiens

<400> 12178

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Phe Ser Pro Val Gly Arg Arg Ser Ser Leu Ser Ser Gly Gly Thr Pro
     50                  55                  60
Thr Arg Met Phe Pro His His Ser Ile Thr Glu Ser Val Asn Tyr Asp
 65                  70                  75                  80
Val Lys Thr Phe Gly Ser Ser Leu Pro Val Lys Val Met Glu Ala Leu
                 85                  90                  95
Thr Leu Ala Glu Val Asp Asp Gln Leu Thr Ile Asn Ile Asp Glu Gly
            100                 105                 110
Gly Trp Ala Cys Leu Val Cys Lys Glu Lys Leu Ile Ile Trp Lys Ile
        115                 120                 125
Ala Leu Ser Pro Ile Thr Lys Leu Ser Val Cys Lys Glu Leu Gln Leu
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Pro Ser Ser Asp Phe His Trp Ser Ala Asp Leu Val Ala Leu Ser Tyr
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Ser Ser Pro Ser Gly Glu Ala His Ser Thr Gln Ala Val Ala Val Met
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Val Ala Thr Arg Glu Gly Ser Ile Arg Tyr Trp Pro Ser Leu Ala Gly
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Glu Asp Thr Tyr Thr Glu Ala Phe Val Asp Ser Gly Gly Asp Lys Thr
        195                 200                 205
Tyr Ser Phe Leu Thr Ala Val Gln Gly Gly Ser Phe Ile Leu Ser Ser
    210                 215                 220
Ser Gly Ser Gln Leu Ile Arg Leu Ile Pro Glu Ser Ser Gly Lys Ile
225                 230                 235                 240
His Gln His Ile Leu Pro Gln Gly Gln Gly Met Leu Ser Gly Ile Gly
                245                 250                 255
Arg Lys Val Ser Ser Leu Phe Gly Ile Leu Ser Pro Ser Ser Asp Leu
            260                 265                 270
Thr Leu Ser Ser Val Leu Trp Asp Arg Glu Arg Ser Ser Phe Tyr Ser
        275                 280                 285
Leu Thr Ser Ser Asn Ile Ser Lys Trp Glu Leu Asp Asp Ser Ser Glu
    290                 295                 300
Lys His Ala Tyr Ser Trp Asp Ile Asn Arg Ala Leu Lys Glu Asn Ile
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Thr Asp Ala Ile Trp Gly Ser Glu Ser Asn Tyr Glu Ala Ile Lys Glu
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09052360.SEQ

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Tyr Tyr Ser Leu Ile Thr Ile Glu Asp Asn Gly Cys Gln Met Ser Asp
370 375 380
Ala Val Thr Val Glu Val Thr Gln Tyr Asn Pro Pro Phe Gln Ser Glu
385 390 395 400
Asp Leu Ile Leu Cys Gln Leu Thr Val Pro Asn Phe Ser Asn Gln Thr
405 410 415
Ala Tyr Leu Tyr Asn Glu Ser Ala Val Tyr Val Cys Ser Thr Gly Thr
420 425 430
Gly Lys Phe Ser Leu Pro Gln Glu Lys Ile Val Phe Asn Ala Gln Gly
435 440 445
Asp Ser Val Leu Gly Ala Gly Ala Cys Gly Gly Val Pro Ile Ile Phe
450 455 460
Ser Arg Asn Ser Gly Leu Val Ser Ile Thr Ser Arg Glu Asn Val Ser
465 470 475 480
Ile Leu Ala Glu Asp Leu Glu Gly Ser Leu Ala Ser Ser Val Ala Gly
485 490 495
Pro Asn Ser Glu Ser Met Ile Phe Glu Thr Thr Thr Lys Asn Glu Thr
500 505 510
Ile Ala Gln Glu Asp Lys Ile Lys Leu Leu Lys Ala Ala Phe Leu Gln
515 520 525
Tyr Cys Arg Lys Asp Leu Gly His Ala Gln Met Val Val Asp Glu Leu
530 535 540
Phe Ser Ser His Ser Asp Leu Asp Ser Asp Ser Glu Leu Asp Arg Ala
545 550 555 560
Val Thr Gln Ile Ser Val Asp Leu Met Asp Asp Tyr Pro Ala Ser Asp
565 570 575
Pro Arg Trp Ala Glu Ser Val Pro Glu Glu Ala Pro Gly Phe Ser Asn
580 585 590
Thr Ser Leu Ile Ile Leu His Gln Leu Glu Asp Lys Met Lys Ala His
595 600 605
Ser Phe Leu Met Asp Phe Ile His Gln Val Gly Leu Phe Gly Arg Leu
610 615 620
Gly Asn Phe Pro Val Arg Gly Thr Pro Met Ala Thr Arg Leu Leu Leu
625 630 635 640
Cys Glu His Ala Glu Lys Leu Ser Ala Ala Ile Val Leu Lys Asn His
645 650 655
His Ser Arg Leu Ser Asp Leu Val Asn Thr Ala Ile Leu Ile Ala Leu
660 665 670
Asn Lys Arg Glu Tyr Glu Ile Pro Ser Asn Leu Thr Pro Ala Asp Val
675 680 685
Phe Phe Arg Glu Val Ser Gln Val Asp Thr Ile Cys Glu Cys Leu Leu
690 695 700
Glu His Glu Glu Gln Val Leu Arg Asp Ala Pro Met Asp Ser Ile Glu
705 710 715 720

0050450 = 0050880

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09552-0050

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<212> PRT
<213> Homo sapiens

<400> 12184

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Asn Arg Val Ala Phe Gly Glu His Lys Ala Val Ala Pro Leu Val Arg
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Tyr Leu Lys Ser Asn Asp Thr Asn Val His Arg Ala Thr Ala Gln Ala
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35 40 45
Glu Gln Thr Ala Ala Asp Glu Val Arg Glu Lys Leu Gly Ser Ser Cys
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Lys Ile Ser Arg Asp Arg Gly Lys Ile Tyr Phe Val Ile Ser Val Glu
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85 90 95
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100 105 110
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115 120 125
Pro Leu Lys Val Trp Lys Ile Asn Ala Ser Phe Lys Lys Lys Lys Ala
130 135 140
Lys Arg Lys Lys Ile Asn Gln Asn Ser Ser Lys Glu Lys Ile Asn Asn
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225                 230                 235                 240
Thr Ser Asn Glu Ala Ala Arg Asp Phe Gly Gly Ala Val Gln Asp Tyr
                245                 250                 255
Phe Lys Trp Lys Ala Asp Met Thr Asn Phe Asp Val Glu Val Leu Leu
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Ser Thr Leu Ala Tyr Gly Met Leu Arg Leu Cys Asp Pro Leu Pro Tyr
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Gly Ala Thr Glu Trp Ser Asp Cys Phe His Ile Ala Gly Asp Asn Asn
            340                 345                 350
Pro Leu Ala Val Asn Arg Ala Ala Asn Asn Ile Ala Ser Leu Leu Thr
        355                 360                 365
Lys Ser Gln Ile Lys Glu Gly Lys Pro Ser Trp Gly Leu Pro Ile Asp
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Ala Val Gln Trp Asp Ile Cys Asn Leu Pro Leu Arg Thr Gly Ser Val
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Lys Arg Asn Trp Asn Leu Tyr Pro Ala Cys Leu Arg Glu Met Ser Arg
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<212> PRT
<213> Homo sapiens

<400> 12188

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<212> DNA
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<222> (15)..(740)

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35 40 45
Gly Pro Ala Ser Thr Phe Asn Asp Arg Val Phe Ala Ser Glu Leu Asn
50 55 60
Ala Gly Ile Ile Lys Thr Asp Gln Asn Tyr Glu Lys Met Met Phe Lys
65 70 75 80
Glu Ala Leu Lys Thr Gly Phe Phe Glu Phe Gln Ala Ala Lys Asp Lys
85 90 95
Tyr Arg Glu Leu Ala Val Glu Gly Met His Arg Glu Leu Val Phe Arg
100 105 110
Phe Ile Glu Val Gln Thr Leu Leu Leu Ala Pro Phe Cys Pro His Leu
115 120 125
Cys Glu His Ile Trp Thr Leu Leu Gly Lys Pro Asp Ser Ile Met Asn
130 135 140
Ala Ser Trp Pro Val Ala Gly Pro Val Asn Glu Val Leu Ile His Ser
145 150 155 160
Ser Gln Tyr Leu Met Glu Val Thr His Asp Leu Arg Leu Arg Leu Lys
165 170 175
Asn Tyr Met Met Pro Ala Lys Gly Lys Lys Thr Asp Lys Gln Pro Leu
180 185 190
Gln Lys Pro Ser His Cys Thr Ile Tyr Val Ala Lys Asn Tyr Pro Pro
195 200 205
Trp Gln His Thr Thr Leu Ser Val Leu Arg Lys His Phe Glu Ala Asn
210 215 220
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225 230 235 240
Met Pro

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<212> DNA
<213> Homo sapiens

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<222> (222)..(2435)

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09552950.090900

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atataagtgt ccatgacagt gtgatcagcc aatggagtga agaagatgag cttgctgatg 360
ccaagcagaa ttcagaatgg atggatgagt gtcaggatgg catgtttgag gcctggtatg 420
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<212> PRT
<213> Homo sapiens

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<400> 12192

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Ser Val Ile Ser Gln Trp Ser Glu Glu Asp Glu Leu Ala Asp Ala Lys
         35                  40                  45
Gln Asn Ser Glu Trp Met Asp Glu Cys Gln Asp Gly Met Phe Glu Ala
     50                  55                  60
Trp Tyr Glu Lys Ile Ala Gln Glu Asp Pro Glu Lys Gln Arg Lys Met
 65                  70                  75                  80
His Met Phe Ile Ala Arg Tyr Cys Asp Leu Leu Asn Val Asp Ile Ser
                 85                  90                  95
Cys Asp Gly Cys Asp Glu Ile Ala Pro Trp His Arg Tyr Arg Cys Leu
            100                 105                 110
Gln Cys Ser Asp Met Asp Leu Cys Lys Thr Cys Phe Leu Gly Gly Val
        115                 120                 125
Lys Pro Glu Gly His Gly Asp Asp His Glu Met Val Asn Met Glu Phe
    130                 135                 140
Thr Cys Asp His Cys Gln Gly Leu Ile Ile Gly Arg Arg Met Asn Cys
145                 150                 155                 160
Asn Val Cys Asp Asp Phe Asp Leu Cys Tyr Gly Cys Tyr Ala Ala Lys
                165                 170                 175
Lys Tyr Ser Tyr Gly His Leu Pro Thr His Ser Ile Thr Ala His Pro
            180                 185                 190
Met Val Thr Ile Arg Ile Ser Asp Arg Gln Arg Leu Ile Gln Pro Tyr
        195                 200                 205
Ile His Asn Tyr Ser Trp Leu Leu Phe Ala Ala Leu Ala Leu Tyr Ser
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Ala His Leu Ala Ser Ala Glu Asp Val Asp Gly Glu Lys Leu Asp Pro
225                 230                 235                 240
Gln Thr His Ser Ser Ala Thr Thr Leu Arg Ser Gln Cys Met Gln Leu
                245                 250                 255
Val Gly Asp Cys Leu Met Lys Ala His Gln Gly Lys Gly Leu Lys Ala
            260                 265                 270
Leu Ala Leu Leu Gly Val Leu Pro Asp Gly Asp Ser Ser Leu Glu Asp
        275                 280                 285
Gln Ala Leu Pro Val Thr Val Pro Thr Gly Ala Ser Glu Glu Gln Leu
    290                 295                 300
Glu Lys Lys Ala Val Gln Gly Ala Glu Leu Ser Glu Ala Gly Asn Gly
305                 310                 315                 320
Lys Arg Ala Val His Glu Glu Ile Arg Pro Val Asp Phe Lys Gln Arg
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            340                 345                 350
Thr Gln Ile Ser Asp Ser Pro Ala Asp Ala Ser Pro Pro Thr Gly Leu
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370 375 380
Lys Ala Val Thr Pro Ser Pro Glu Gln Val Phe Ala Glu Cys Ser Gln
385 390 395 400
Lys Arg Ile Leu Gly Leu Leu Ala Ala Met Leu Pro Pro Leu Lys Ser
405 410 415
Gly Pro Thr Val Pro Leu Ile Asp Leu Glu His Val Leu Pro Leu Met
420 425 430
Phe Gln Val Val Ile Ser Asn Ala Gly His Leu Asn Glu Thr Tyr His
435 440 445
Leu Thr Leu Gly Leu Leu Gly Gln Leu Ile Ile Arg Leu Leu Pro Ala
450 455 460
Glu Val Asp Ala Ala Val Ile Lys Val Leu Ser Ala Lys His Asn Leu
465 470 475 480
Phe Ala Ala Gly Asp Ser Ser Ile Val Pro Asp Gly Trp Lys Thr Thr
485 490 495
His Leu Leu Phe Ser Leu Gly Ala Val Cys Leu Asp Ser Arg Val Gly
500 505 510
Leu Asp Trp Ala Cys Ser Met Ala Glu Ile Leu Arg Ser Leu Asn Ser
515 520 525
Ala Pro Leu Trp Arg Asp Val Ile Ala Thr Phe Thr Asp His Cys Ile
530 535 540
Lys Gln Leu Pro Phe Gln Leu Lys His Thr Asn Ile Phe Thr Leu Leu
545 550 555 560
Val Leu Val Gly Phe Pro Gln Val Leu Cys Val Gly Thr Arg Cys Val
565 570 575
Tyr Met Asp Asn Ala Asn Glu Pro His Asn Val Ile Ile Leu Lys His
580 585 590
Phe Thr Glu Lys Asn Arg Ala Val Ile Val Asp Val Lys Thr Arg Lys
595 600 605
Arg Lys Thr Val Lys Asp Tyr Gln Leu Val Gln Lys Gly Gly Gly Gln
610 615 620
Glu Cys Gly Asp Ser Arg Ala Gln Leu Ser Gln Tyr Ser Gln His Phe
625 630 635 640
Ala Phe Ile Ala Ser His Leu Leu Gln Ser Ser Met Asp Ser His Cys
645 650 655
Pro Glu Ala Val Glu Ala Thr Trp Val Leu Ser Leu Ala Leu Lys Gly
660 665 670
Leu Tyr Lys Thr Leu Lys Ala His Gly Phe Glu Glu Ile Arg Ala Thr
675 680 685
Phe Leu Gln Thr Asp Leu Leu Lys Leu Leu Val Lys Lys Cys Ser Lys
690 695 700
Gly Thr Gly Phe Ser Lys Thr Trp Leu Leu Arg Asp Leu Glu Val Arg
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725 730 735
Arg Ser

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<211> 2585
<212> DNA
<213> Homo sapiens

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cccgtgggag ctggaccccg actggtcccc cagcccggcc caggcctcgg gcgccgccgc 360
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<212> PRT
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35 40 45
Gly Asp Trp Pro Gly Val Val Leu Ser Met Glu Arg Ala Leu Arg Ser
50 55 60
Arg Ala Ala Leu Arg Ala Leu Arg Leu Arg Cys Arg Thr Gln Cys Ala
65 70 75 80
Ala Asp Phe Pro Trp Glu Leu Asp Pro Asp Trp Ser Pro Ser Pro Ala
85 90 95
Gln Ala Ser Gly Ala Ala Ala Leu Arg Asp Leu Ser Phe Phe Gly Gly
100 105 110
Leu Leu Arg Arg Ala Ala Cys Leu Arg Arg Cys Leu Gly Pro Pro Ala
115 120 125
Ala His Ser Leu Ser Glu Glu Met Glu Leu Glu Phe Arg Lys Arg Ser
130 135 140
Pro Tyr Asn Tyr Leu Gln Val Ala Tyr Phe Lys Ile Asn Lys Leu Glu
145 150 155 160
Lys Ala Val Ala Ala Ala His Thr Phe Phe Val Gly Asn Pro Glu His
165 170 175
Met Glu Met Gln Gln Asn Leu Asp Tyr Tyr Gln Thr Met Ser Gly Val
180 185 190
Lys Glu Ala Asp Phe Lys Asp Leu Glu Thr Gln Pro His Met Gln Glu
195 200 205
Phe Arg Leu Gly Val Arg Leu Tyr Ser Glu Glu Gln Pro Gln Glu Ala
210 215 220
Val Pro His Leu Glu Ala Ala Leu Gln Glu Tyr Phe Val Ala Tyr Glu
225 230 235 240
Glu Cys Arg Ala Leu Cys Glu Gly Pro Tyr Asp Tyr Asp Gly Tyr Asn
245 250 255

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260 265 270
Ile Gln Val Leu Asn Cys Lys Gln Asn Cys Val Thr Glu Leu Ala Ser
275 280 285
His Pro Ser Arg Glu Lys Pro Phe Glu Asp Phe Leu Pro Ser His Tyr
290 295 300
Asn Tyr Leu Gln Phe Ala Tyr Tyr Asn Ile Gly Asn Tyr Thr Gln Ala
305 310 315 320
Val Glu Cys Ala Lys Thr Tyr Leu Leu Phe Phe Pro Asn Asp Glu Val
325 330 335
Met Asn Gln Asn Leu Ala Tyr Tyr Ala Ala Met Leu Gly Glu Glu His
340 345 350
Thr Arg Ser Ile Gly Pro Arg Glu Ser Ala Lys Glu Tyr Arg Gln Arg
355 360 365
Ser Leu Leu Glu Lys Glu Leu Leu Phe Phe Ala Tyr Asp Val Phe Gly
370 375 380
Ile Pro Phe Val Asp Pro Asp Ser Trp Thr Pro Glu Glu Val Ile Pro
385 390 395 400
Lys Arg Leu Gln Glu Lys Gln Lys Ser Glu Arg Glu Thr Ala Val Arg
405 410 415
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420 425 430
Glu Glu Lys Thr Lys Glu Ser Leu Asp Val Ser Arg Leu Thr Arg Glu
435 440 445
Gly Gly Pro Leu Leu Tyr Glu Gly Ile Ser Leu Thr Met Asn Ser Lys
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465 470 475 480
His Glu Cys Gln Glu Leu Gln Arg Leu Thr Asn Val Ala Ala Thr Ser
485 490 495
Gly Asp Gly Tyr Arg Gly Gln Thr Ser Pro His Thr Pro Asn Glu Lys
500 505 510
Phe Tyr Gly Val Thr Val Phe Lys Ala Leu Lys Leu Gly Gln Glu Gly
515 520 525
Lys Val Pro Leu Gln Ser Ala His Leu Tyr Tyr Asn Val Thr Glu Lys
530 535 540
Val Arg Arg Ile Met Glu Ser Tyr Phe Arg Leu Asp Thr Pro Leu Tyr
545 550 555 560
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565 570 575
Ala Glu Arg Lys Asp Asp Ser His Pro Val His Val Asp Asn Cys Ile
580 585 590
Leu Asn Ala Glu Thr Leu Val Cys Val Lys Glu Pro Pro Ala Tyr Thr
595 600 605
Phe Arg Asp Tyr Ser Ala Ile Leu Tyr Leu Asn Gly Asp Phe Asp Gly
610 615 620
Gly Asn Phe Tyr Phe Thr Glu Leu Asp Ala Lys Thr Val Thr Ala Glu
625 630 635 640

0501050 = 0501050

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660 665 670
Ala Leu Trp Phe Thr Leu Asp Pro Arg His Ser Glu Arg Asp Arg Val
675 680 685
Gln Ala Asp Asp Leu Val Lys Met Leu Phe Ser Pro Glu Glu Met Asp
690 695 700
Leu Ser Gln Glu Gln Pro Leu Asp Ala Gln Gln Gly Pro Pro Glu Pro
705 710 715 720
Ala Gln Glu Ser Leu Ser Gly Ser Glu Ser Lys Pro Lys Asp Glu Leu
725 730 735

09/05/2005 09:38:00

<210> 12195
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (8)..(1687)

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gcaaaagtgg atggctgtta agtgtgtaca ccgaacacag caggacagac cagagatttg 360
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<213> Homo sapiens

<400> 12196

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Val Val His Gly Phe Tyr Asn Pro Ala Val Ser Arg Ile Val Glu Ala
         35                  40                  45
Gly Cys Val Cys Asn Asp Ala Val Ile Arg Asn Asn Thr Leu Met Gly
     50                  55                  60
Lys Pro Thr Glu Gly Ala Leu Ile Ala Leu Ala Met Lys Met Gly Leu
 65                  70                  75                  80
Asp Gly Leu Gln Gln Asp Tyr Ile Arg Lys Ala Glu Tyr Pro Phe Ser
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Ser Glu Gln Lys Trp Met Ala Val Lys Cys Val His Arg Thr Gln Gln
            100                 105                 110
Asp Arg Pro Glu Ile Cys Phe Met Lys Gly Ala Tyr Glu Gln Val Ile
        115                 120                 125
Lys Tyr Cys Thr Thr Tyr Gln Ser Lys Gly Gln Thr Leu Thr Leu Thr
    130                 135                 140
Gln Gln Gln Arg Asp Val Tyr Gln Gln Glu Lys Ala Arg Met Gly Ser
145                 150                 155                 160
Ala Gly Leu Arg Val Leu Ala Leu Ala Ser Gly Pro Glu Leu Gly Gln
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Leu Gly Leu Tyr Ser Lys Thr Ser Gln Ser Val Ser Gly Glu Glu Ile
225 230 235 240
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245 250 255
Val Phe Tyr Arg Ala Ser Pro Arg His Lys Met Lys Ile Ile Lys Ser
260 265 270
Leu Gln Lys Asn Gly Ser Val Val Ala Met Thr Gly Asp Gly Val Asn
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Thr Gly Thr Asp Val Cys Lys Glu Ala Ala Asp Met Ile Leu Val Asp
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Tyr Asn Asn Ile Lys Asn Phe Val Arg Phe Gln Leu Ser Thr Ser Ile
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Pro Leu Asn Ala Met Gln Ile Leu Trp Ile Asn Ile Ile Met Asp Gly
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Pro Pro Ala Gln Ser Leu Gly Val Glu Pro Val Asp Lys Asp Val Ile
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Ile Leu Lys Ile Leu Val Ser Ser Ile Ile Ile Val Cys Gly Thr Leu
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Phe Val Phe Trp Arg Glu Leu Arg Asp Asn Val Ile Thr Pro Arg Asp
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Thr Thr Met Thr Phe Thr Cys Phe Val Phe Phe Asp Met Phe Asn Ala
450 455 460
Leu Ser Ser Arg Ser Gln Thr Lys Ser Val Phe Glu Ile Gly Leu Cys
465 470 475 480
Ser Asn Arg Met Phe Cys Tyr Ala Val Leu Gly Ser Ile Met Gly Gln
485 490 495
Leu Leu Val Ile Tyr Phe Pro Pro Leu Gln Lys Val Phe Gln Thr Glu
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Ser Leu Ser Ile Leu Asp Leu Leu Phe Leu Leu Gly Leu Thr Ser Ser
515 520 525
Val Cys Ile Val Ala Glu Ile Ile Lys Lys Val Glu Arg Ser Arg Glu
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<213> Homo sapiens

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Gln Ala Arg Ala Gln Ala Ala Leu Gln Ala Val Ser Ala Val Gln Ser
50 55 60
Gly Ser Leu Ala Leu Ser Gly Gly Pro Ser Asn Glu Gly Thr Val Leu
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Pro Gly Gln Ser Pro Val Leu Arg Ile Ile Ile Glu Asn Leu Phe Tyr
85 90 95
Pro Val Thr Leu Glu Val Leu His Gln Ile Phe Ser Lys Phe Gly Thr
100 105 110
Val Leu Lys Ile Ile Thr Phe Thr Lys Asn Asn Gln Phe Gln Ala Leu
115 120 125
Leu Gln Tyr Ala Asp Pro Val Asn Ala His Tyr Ala Lys Met Ala Leu
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Asp Gly Gln Asn Ile Tyr Asn Ala Cys Cys Thr Leu Arg Ile Asp Phe
145 150 155 160
Ser Lys Leu Ile Ser Leu Asn Val Lys Tyr Asn Asn Asp Lys Ser Arg
165 170 175
Asp Phe Thr Arg Leu Asp Leu Pro Thr Gly Asp Gly Gln Pro Ser Leu
180 185 190
Glu Pro Pro Met Ala Ala Ala Phe Gly Ala Pro Gly Ile Ile Ser Ser
195 200 205
Pro Tyr Ala Gly Ala Ala Gly Phe Ala Pro Ala Ile Gly Phe Pro Gln
210 215 220
Ala Thr Gly Leu Ser Val Pro Ala Val Pro Gly Ala Leu Gly Pro Leu
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        275                 280                 285
Asp Val His Arg Val Lys Ile Met Phe Asn Lys Lys Glu Asn Ala Leu
    290                 295                 300
Val Gln Met Ala Asp Ala Asn Gln Ala Gln Leu Ala Met Asn His Leu
305                 310                 315                 320
Ser Gly Gln Arg Leu Tyr Gly Lys Val Leu Arg Ala Thr Leu Ser Lys
                325                 330                 335
His Gln Ala Val Gln Leu Pro Arg Glu Gly Gln Glu Asp Gln Gly Leu
            340                 345                 350
Thr Lys Asp Phe Ser Asn Ser Pro Leu His Arg Phe Lys Lys Pro Gly
        355                 360                 365
Ser Lys Asn Phe Gln Asn Ile Phe Pro Pro Ser Ala Thr Leu His Leu
    370                 375                 380
Ser Asn Ile Pro Pro Ser Val Thr Val Asp Asp Leu Lys Asn Leu Phe
385                 390                 395                 400
Ile Glu Ala Gly Cys Ser Val Lys Ala Phe Lys Phe Phe Gln Lys Asp
                405                 410                 415
Arg Lys Met Ala Leu Ile Gln Leu Gly Ser Val Glu Glu Ala Ile Gln
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<212> PRT
<213> Homo sapiens

<400> 12200

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         35                  40                  45
Gly Met Pro Trp Val Glu Trp Thr Arg Ser Arg Gln Pro Tyr Pro Gln
     50                  55                  60
Glu Lys Gln Asn Leu Gly Arg His Ser Lys Arg Arg Arg Lys Gly Glu
 65                  70                  75                  80
Leu Leu Gln Thr Met Lys Arg Ile Thr Tyr Ser His Pro Pro Lys Leu
                 85                  90                  95
Thr Asp Glu Asp Phe Ser Pro Phe Gly Ser Gly Gly Gly Leu Phe Ser
            100                 105                 110
Gly Gly Lys Gly Leu Phe Asp Asp Glu Asp Glu Glu Ser Asp Leu Phe
        115                 120                 125
Thr Glu Ala Pro Gln Asp Arg Gln Ala Gly Ala Ser Val Lys Glu Glu
    130                 135                 140
Ser Ser Ser Ser Lys Pro Gly Lys Lys Ile Pro Ala Gly Ala Val Ser
145                 150                 155                 160
Val Phe Leu Gly Asp Thr Asp Val Phe Gly Ala Ala Ser Val Pro Ser
                165                 170                 175
Met Lys Glu Pro Gln Lys Pro Glu Gln Pro Thr Pro Arg Lys Ser Pro
            180                 185                 190
Tyr Gly Pro Pro Pro Thr Gly Leu Phe Asp Asp Asp Asp Gly Asp Asp
        195                 200                 205
Asp Asp Asp Phe Phe Ser Ala Pro His Ser Lys Pro Ser Lys Thr Gly
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Lys Val Gln Ser Thr Ala Asp Ile Phe Gly Asp Glu Glu Gly Asp Leu
225                 230                 235                 240
Phe Lys Glu Lys Ala Val Ala Ser Pro Glu Ala Thr Val Ser Gln Thr
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Asp Glu Asn Lys Ala Arg Ala Glu Lys Lys Val Thr Leu Ser Tyr Ser
            260                 265                 270
Lys Asn Leu Lys Pro Ser Ser Glu Thr Lys Thr Gln Lys Gly Leu Phe
        275                 280                 285
Ser Asp Glu Glu Asp Ser Glu Asp Leu Phe Ser Ser Gln Ser Ala Ser
    290                 295                 300
Lys Leu Lys Gly Ala Ser Leu Leu Pro Gly Lys Leu Pro Thr Leu Val
305                 310                 315                 320
Ser Leu Phe Asp Asp Glu Asp Glu Glu Asp Asn Leu Phe Gly Gly Thr
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Ala Lys Ala Ser Glu Leu Ser Lys Lys Lys Ala Ser Ala Leu Leu Phe
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370 375 380
Leu Ala Ser Asp Ser Arg Ser Lys Gly Glu Pro Arg Asp Ser Gly Thr
385 390 395 400
Leu Gln Ser Gln Glu Ala Lys Ala Val Lys Lys Thr Ser Leu Phe Glu
405 410 415
Glu Asp Glu Glu Asp Asp Leu Phe Ala Ile Ala Lys Asp Ser Gln Lys
420 425 430
Lys Thr Gln Arg Val Ser Leu Leu Phe Glu Asp Asp Val Asp Ser Gly
435 440 445
Gly Ser Leu Phe Gly Ser Pro Pro Thr Ser Val Pro Pro Ala Thr Lys
450 455 460
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485 490 495
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His Ser Asp Leu Phe Ser Ser Ser Ser Pro Trp Asp Lys Gly Thr Lys
530 535 540
Pro Arg Thr Lys Thr Val Leu Ser Leu Phe Asp Glu Glu Glu Asp Lys
545 550 555 560
Met Glu Asp Gln Asn Ile Ile Gln Ala Pro Gln Lys Glu Val Gly Lys
565 570 575
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Glu Glu Leu Leu Phe Ser His Lys Leu Gln Lys Asp Asn Asp Pro Asp
595 600 605
Val Asp Leu Phe Ala Gly Thr Lys Lys Thr Lys Leu Leu Glu Pro Ser
610 615 620
Val Gly Ser Leu Phe Gly Asp Asp Glu Asp Asp Asp Leu Phe Ser Ser
625 630 635 640
Ala Lys Ser Gln Pro Leu Val Gln Glu Lys Lys Arg Val Val Lys Lys
645 650 655
Asp His Ser Val Asp Ser Phe Lys Asn Gln Lys His Pro Glu Ser Ile
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Gln Gly Ser Lys Glu Lys Gly Ile Trp Lys Pro Glu Thr Pro Gln Asp
675 680 685
Ser Ser Gly Leu Ala Pro Phe Lys Thr Lys Glu Pro Ser Thr Arg Ile
690 695 700
Gly Lys Ile Gln Ala Asn Leu Ala Ile Asn Pro Ala Ala Leu Leu Pro
705 710 715 720

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            740                 745                 750
Pro Val Leu Pro Gly Ser Gly Glu Ala Gly Val Ser Phe Asp Leu Pro
        755                 760                 765
Ala Gln Ala Asp Thr Leu His Ser Ala Asn Lys Ser Arg Val Lys Met
    770                 775                 780
Arg Gly Lys Arg Arg Pro Gln Thr Arg Ala Ala Arg Arg Leu Ala Ala
785                 790                 795                 800
Gln Glu Ser Ser Glu Thr Glu Asp Met Ser Val Pro Arg Gly Pro Ile
                805                 810                 815
Ala Gln Trp Ala Asp Gly Ala Ile Ser Pro Asn Gly His Arg Pro Gln
            820                 825                 830
Leu Arg Ala Ala Ser Gly Glu Asp Ser Thr Glu Glu Ala Leu Ala Ala
        835                 840                 845
Ala Ala Ala Pro Trp Glu Gly Gly Pro Val Pro Gly Val Asp Arg Ser
    850                 855                 860
Pro Phe Ala Lys Ser Leu Gly His Ser Arg Gly Glu Ala Asp Leu Phe
865                 870                 875                 880
Asp Ser Gly Asp Ile Phe Ser Thr Gly Thr Gly Ser Gln Ser Val Glu
                885                 890                 895
Arg Thr Lys Pro Lys Ala Lys Phe Gly Lys Leu Trp Pro Pro His Cys
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His Ile Leu Leu Ile Lys Phe Tyr Trp Asn
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<213> Homo sapiens

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<221> CDS
<222> (608)..(1666)

<400> 12201

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09529503.090209

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<213> Homo sapiens

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His His Gln Ser Phe Gly Lys Gln Lys Ser Gly Pro Ile Ser Pro Gly
65                  70                  75                  80
Ile His Ser Cys Asp Leu Thr Val Glu Gly Leu Ala Thr Val Thr Arg
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Ile Ala Pro Gly Ser Ala Lys Val Ile Asp Val Tyr Arg Thr Gly Ala
            100                 105                 110
Lys Cys Val Pro Gly Glu Ala Gly Asp Ser Gly Lys Pro Gly Ala Ala
        115                 120                 125
Phe His Gln Val Gly Leu Leu Arg Val Lys Pro Gly Arg Gly Asp Arg
    130                 135                 140
Thr Arg Ser Met Ser Cys Ser Asp Lys Met Ala Arg Trp Asn Val Leu
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Gly Cys Gln Gly Ala Leu Leu Met His Leu Leu Glu Glu Pro Ile Tyr
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Leu Ser Ala Val Val Ile Gly Lys Cys Pro Tyr Ser Gln Glu Ala Met
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Gln Arg Ala Leu Ile Gly Arg Cys Gln Asn Val Ser Ala Leu Pro Lys
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Gly Phe Gly Val Gln Glu Leu Lys Ile Leu Gln Ser Asp Leu Leu Phe
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Glu Gln Ser Arg Ser Ala Val Gln Ala Lys Arg Ala Asp Ser Pro Gly
225                 230                 235                 240
Arg Leu Val Pro Cys Gly Ala Ala Ile Ser Trp Ser Ala Val Pro Glu
                245                 250                 255
Gln Pro Leu Asp Val Thr Ala Asn Gly Phe Pro Gln Gly Thr Thr Lys
            260                 265                 270
Lys Thr Ile Gly Ser Leu Gln Ala Arg Ser Gln Ile Ser Lys Val Glu
        275                 280                 285
Leu Phe Arg Ser Phe Gln Lys Leu Leu Ser Arg Ile Ala Arg Asp Lys
    290                 295                 300
Trp Pro His Ser Leu Arg Val Gln Lys Leu Asp Thr Tyr Gln Glu Tyr
305                 310                 315                 320
Lys Glu Ala Ala Ser Ser Tyr Gln Glu Ala Trp Ser Thr Leu Arg Lys
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<212> DNA

<213> Homo sapiens

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<221> CDS
<222> (283)..(1488)

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<212> PRT
<213> Homo sapiens

<400> 12204

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Glu His Phe Gln Pro Lys Gln Ile Val Lys Ser Leu Ile Pro Ser Trp
     50                  55                  60
Asn Lys Leu Val Phe Phe Glu Val Ser Pro Val Ser Phe His Gln Val
 65                  70                  75                  80
Ser Glu Val Leu Ser Glu Glu Lys Ser Arg Leu Ser Ile Ser Gly Trp
                 85                  90                  95
Phe His Gly Pro Ser Leu Thr Arg Pro Pro Asn Tyr Phe Glu Pro Pro
            100                 105                 110
Ile Pro Arg Ser Pro His Ile Pro Gln Asp His Glu Ile Leu Tyr Asp
        115                 120                 125
Trp Ile Asn Pro Thr Tyr Leu Asp Met Asp Tyr Gln Val Gln Ile Gln
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Glu Glu Phe Glu Glu Ser Ser Glu Ile Leu Leu Lys Glu Phe Leu Lys
145                 150                 155                 160
Pro Glu Lys Phe Thr Lys Val Cys Glu Ala Leu Glu His Gly His Val
                165                 170                 175
Glu Trp Ser Ser Arg Gly Pro Pro Asn Lys Arg Phe Tyr Glu Lys Ala
            180                 185                 190
Glu Glu Ser Lys Leu Pro Glu Ile Leu Lys Glu Cys Met Lys Leu Phe
        195                 200                 205
Arg Ser Glu Ala Leu Phe Leu Leu Leu Ser Asn Phe Thr Gly Leu Lys
    210                 215                 220
Leu His Phe Leu Ala Pro Ser Glu Glu Asp Glu Met Asn Asp Lys Lys
225                 230                 235                 240
Glu Ala Glu Thr Thr Asp Ile Thr Glu Glu Gly Thr Ser His Ser Pro
                245                 250                 255
Pro Glu Pro Glu Asn Asn Gln Met Ala Ile Ser Asn Asn Ser Gln Gln
            260                 265                 270
Ser Asn Glu Gln Thr Asp Pro Glu Pro Glu Glu Asn Glu Thr Lys Lys
        275                 280                 285
Glu Ser Ser Val Pro Met Cys Gln Gly Glu Leu Arg His Trp Lys Thr
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Gly His Tyr Thr Leu Ile His Asp His Ser Lys Ala Glu Phe Ala Leu
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0050.0047800

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            340                 345                 350
Val Asn Pro Glu Ser Asn Ser Leu Ala Leu Val Tyr Arg Asp Arg Glu
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Thr Leu Lys Phe Val Lys His Ile Asn His Arg Ser Leu Glu Gln Lys
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<210> 12205
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (163)..(672)

<400> 12205

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<212> PRT
<213> Homo sapiens

<400> 12206

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Gly Gly Leu Cys Tyr Tyr Leu Ser Pro Pro Glu Ser Phe Gly Ser Val
         35                  40                  45
Leu Glu Asp Pro Val His Ala Val Val Tyr Ile Val Phe Met Leu Gly
     50                  55                  60
Ser Cys Ala Phe Phe Ser Lys Thr Trp Ile Glu Val Ser Gly Ser Ser
 65                  70                  75                  80
Ala Lys Asp Val Ala Lys Gln Leu Lys Glu Gln Gln Met Val Met Arg
                 85                  90                  95
Gly His Arg Glu Thr Ser Met Val His Glu Leu Asn Arg Tyr Ile Pro
            100                 105                 110
Thr Ala Ala Ala Phe Gly Gly Leu Cys Ile Gly Ala Leu Ser Val Leu
        115                 120                 125
Ala Asp Phe Leu Gly Ala Ile Gly Ser Gly Thr Gly Ile Leu Leu Ala
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Val Thr Ile Ile Tyr Gln Tyr Phe Glu Ile Phe Val Lys Glu Gln Ser
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<210> 12207
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<212> DNA
<213> Homo sapiens

<220>
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<222> (1432)..(1866)

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Tyr	Ile	Trp	Ser	Val	Leu	Thr	Gly	Lys	Val	Glu	Lys	Val	Leu	Ser	Lys
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Gln	His	Ser	Ser	Ser	Ile	Asn	Ala	Val	Ala	Trp	Ser	Pro	Ser	Gly	Ser
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0050450-0050503

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Lys Arg Glu Thr Arg Val Glu Arg Pro Glu Arg Ser Gly Arg Glu Val
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<400> 12211

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<212> PRT
<213> Homo sapiens

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Gly Ser Gly Phe Lys Val Val Val Gly Ser Arg Asn Pro Lys Arg Thr
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Ala Arg Leu Tyr Pro Ser Ala Ala Gln Val Thr Phe Gln Glu Glu Ala
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165 170 175
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180 185 190
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Leu Pro Ala Trp Lys Val Pro Thr Leu Leu Ala Leu Gly Leu Phe Val
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Gln Arg Phe Pro Asp Trp Leu Asp His Trp Leu Gln His Arg Lys Gln
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Phe Cys Leu Pro Leu Arg Arg Ala His Arg Tyr Asp Leu Val Asn Leu
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            420                 425                 430
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Phe Leu Leu Pro Cys Ile Ser Arg Arg Leu Ala Arg Ile Arg Arg Gly
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09/15/2005 09:56 FAX

<400> 12214

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Cys Leu Glu Gly Met Glu Glu Ser Gly Ser Glu Gly Leu Asp Glu Leu
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Lys Asp Val Gly Ala Gln Ile Leu Leu His Ser His Lys Lys Asp Ile
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Ser Ile Pro Val Thr Leu Thr Phe Gln Glu Ala Thr Gly Lys Asn Val
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Met Leu Leu Pro Val Gly Ser Ala Asp Asp Gly Ala His Ser Gln Asn
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<400> 12215

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<213> Homo sapiens

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         35                  40                  45
Pro Leu Ser Arg Cys Gly Phe Leu His Leu Pro Leu Pro Thr Val Asp
     50                  55                  60
Leu Pro Arg Arg Pro His Pro Ser Gln Arg Val Trp His Glu Trp Arg
 65                  70                  75                  80
Arg Pro His Ser Cys Arg Pro Arg Gly Arg Gly Ser His Ser Ser Arg
                 85                  90                  95
Gly Pro His Ala His Thr Cys Thr His His Asp His Arg His Gln Gly
            100                 105                 110
Gly Gly Leu His Val Pro Ala His Gln Ala His Pro Gly Gly Gln Leu
        115                 120                 125
Cys Gln Arg Ala Pro Gly Ser Pro Ser Lys Ala Ser Arg Gly Gln Glu
    130                 135                 140
Lys Gly Leu Val Glu Thr Gly Pro His Leu Leu Arg Leu Leu Ala Thr
145                 150                 155                 160
Thr Thr Pro Ala Ser Arg Pro Pro Arg Leu Pro Ser Leu Ser Pro Phe
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<400> 12218

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US 2005/0095600 A1

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<400> 12219

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Pro Ser Ser Val Lys Phe Ser Glu Leu Thr Thr Thr Ser Val Asn Val
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225                 230                 235                 240
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0562345 : 20040000

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Lys Pro Ser Glu Ile Ser Asp Ser Gln Gly Ser Asp Ser Glu Tyr Glu
    450                 455                 460
Val Asp Ser Asn His Gln Lys Ala His Ser Phe Val Asn His Tyr Ile
465                 470                 475                 480
Ser Asp Pro Thr Tyr Tyr Asn Ser Trp Arg Arg Gln Gln Arg Gly Ile
                485                 490                 495
Ser Arg Ala Gln Ala Tyr Ser Tyr Thr Glu Ser Asp Ser Gly Glu Pro
            500                 505                 510
Asp His Thr Thr Val Thr Asn Ser Thr Ser Thr Gln Gln Gly Ser Leu
        515                 520                 525
Phe Arg Pro Lys Ala Ser Arg Thr Pro Thr Pro Gln Asn Pro Pro Asn
    530                 535                 540
Pro Pro Ser Gln Gln Ser Thr Leu Tyr Arg Pro Pro Ser Ser Leu Ala
545                 550                 555                 560
Pro Gly Ser Arg Ala Pro Ile Ala Gly Phe Ser Ser Phe Val
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<210> 12220
<211> 2949
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (245)..(1042)

<400> 12220
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gccgccgcgc ttctacccgc gctacgtgct accgctcgcc ttcggcaagt acttcgcgtc 180
cgtgtcagcg cacgtcagca tctggaaggt gcccgtgtcc tatgcacaca ccgtcaaggc 240
caccatgccc atctgggtgg tcctcctgtc ccggatcatt atgaaggaga agcagagcac 300
caaggtatac ttgtcactca tccccatcat cagcggtgtc ctgctggcca ccgtcaccga 360
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caacatcctg ggctgccacg ccgtcttctt tatgatcccc acctgggttc tggtggacct 540
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gctcctggct gtcagcggct tctgtaactt tgcccagaat gttatcgcct tcagcatcct 660
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gaccgccatc ctgggggtct tcctctataa caagaccaag tacgatgcaa accagcaagc 840
caggaagcac ctcctccccg tcaccacagc agacctgagc agcaaggagc gtcaccggag 900
cccactggag aagccccaca acggcctcct cttcccccag cacggggact atcagtacgg 960

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<210> 12221
<211> 266
<212> PRT
<213> Homo sapiens

<400> 12221
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Gln Ser Thr Lys Val Tyr Leu Ser Leu Ile Pro Ile Ile Ser Gly Val
20 25 30
Leu Leu Ala Thr Val Thr Glu Leu Ser Phe Asp Met Trp Gly Leu Val
35 40 45

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Ser Ala Leu Ala Ala Thr Leu Cys Phe Ser Leu Gln Asn Ile Phe Ser
     50                  55                  60
Lys Lys Val Leu Arg Asp Ser Arg Ile His His Leu Arg Leu Leu Asn
 65                  70                  75                  80
Ile Leu Gly Cys His Ala Val Phe Phe Met Ile Pro Thr Trp Val Leu
                 85                  90                  95
Val Asp Leu Ser Ala Phe Leu Val Ser Ser Asp Leu Thr Tyr Val Tyr
            100                 105                 110
Gln Trp Pro Trp Thr Leu Leu Leu Leu Ala Val Ser Gly Phe Cys Asn
        115                 120                 125
Phe Ala Gln Asn Val Ile Ala Phe Ser Ile Leu Asn Leu Val Ser Pro
    130                 135                 140
Leu Ser Tyr Ser Val Ala Asn Ala Thr Lys Arg Ile Met Val Ile Thr
145                 150                 155                 160
Val Ser Leu Ile Met Leu Arg Asn Pro Val Thr Ser Thr Asn Val Leu
                165                 170                 175
Gly Met Met Thr Ala Ile Leu Gly Val Phe Leu Tyr Asn Lys Thr Lys
            180                 185                 190
Tyr Asp Ala Asn Gln Gln Ala Arg Lys His Leu Leu Pro Val Thr Thr
        195                 200                 205
Ala Asp Leu Ser Ser Lys Glu Arg His Arg Ser Pro Leu Glu Lys Pro
    210                 215                 220
His Asn Gly Leu Leu Phe Pro Gln His Gly Asp Tyr Gln Tyr Gly Arg
225                 230                 235                 240
Asn Asn Ile Leu Thr Asp His Phe Gln Tyr Ser Arg Gln Ser Tyr Pro
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Asn Ser Tyr Ser Leu Asn Arg Tyr Asp Val
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<210> 12222
<211> 2484
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (139)..(2484)

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ccgggtcccg cggggaaaat ggtggagcca gggcaagatt tactgcttgc tgctttgagg 180
gagagtggaa ttagtccgaa tgacctcttt gatattgatg gtggagatgc agggcttgca 240
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ctattaaatg tgaggcagcc tccatctact acaacatttg tgctgaatca aataaatcat 420
cttccaccct tgggatctac aattgtaatg actaaaacac cacctgtaac aaccaacagg 480

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gatctactga aaaataatag tcttaatgaa ctgatgaaac taaagccacc tgctaatatt 660
gctcagccag tagcaacagc agctactgat gtaagcaatg gtacagtaaa gaaagagtct 720
tctaataaag aaggagctag aatgtggata aacgacatga agatgaggag tttttcccca 780
accatgaagg ttcctgttgt aaaagaagat gatgaaccag aggaagaaga tgaagaagaa 840
atgggtcatg cagaaaccta tgcagaatac atgccaataa aattaaaaat tggcctacgt 900
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ccctggttaa ttagaaaaga ccac 2484

<210> 12223
<211> 782
<212> PRT
<213> Homo sapiens

<400> 12223
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Gly Ile Ser Pro Asn Asp Leu Phe Asp Ile Asp Gly Gly Asp Ala Gly
20 25 30
Leu Ala Thr Pro Met Pro Thr Pro Ser Val Gln Gln Ser Val Pro Leu
35 40 45

Ser Ala Leu Glu Leu Gly Leu Glu Thr Glu Ala Ala Val Pro Val Lys
50 55 60
Gln Glu Pro Glu Thr Val Pro Thr Pro Ala Leu Leu Asn Val Arg Gln
65 70 75 80
Pro Pro Ser Thr Thr Thr Phe Val Leu Asn Gln Ile Asn His Leu Pro
85 90 95
Pro Leu Gly Ser Thr Ile Val Met Thr Lys Thr Pro Pro Val Thr Thr
100 105 110
Asn Arg Gln Thr Ile Thr Leu Thr Lys Phe Ile Gln Thr Thr Ala Ser
115 120 125
Thr Arg Pro Ser Val Ser Ala Pro Thr Val Arg Asn Ala Met Thr Ser
130 135 140
Ala Pro Ser Lys Asp Gln Val Gln Leu Lys Asp Leu Leu Lys Asn Asn
145 150 155 160
Ser Leu Asn Glu Leu Met Lys Leu Lys Pro Pro Ala Asn Ile Ala Gln
165 170 175
Pro Val Ala Thr Ala Ala Thr Asp Val Ser Asn Gly Thr Val Lys Lys
180 185 190
Glu Ser Ser Asn Lys Glu Gly Ala Arg Met Trp Ile Asn Asp Met Lys
195 200 205
Met Arg Ser Phe Ser Pro Thr Met Lys Val Pro Val Val Lys Glu Asp
210 215 220
Asp Glu Pro Glu Glu Glu Asp Glu Glu Glu Met Gly His Ala Glu Thr
225 230 235 240
Tyr Ala Glu Tyr Met Pro Ile Lys Leu Lys Ile Gly Leu Arg His Pro
245 250 255
Asp Ala Val Val Glu Thr Ser Ser Leu Ser Ser Val Thr Pro Pro Asp
260 265 270
Val Trp Tyr Lys Thr Ser Ile Ser Glu Glu Thr Ile Asp Asn Gly Trp
275 280 285
Leu Ser Ala Leu Gln Leu Glu Ala Ile Thr Tyr Ala Ala Gln Gln His
290 295 300
Glu Thr Phe Leu Pro Asn Gly Asp Arg Ala Gly Phe Leu Ile Gly Asp
305 310 315 320
Gly Ala Gly Val Gly Lys Gly Arg Thr Ile Ala Gly Ile Ile Tyr Glu
325 330 335
Asn Tyr Leu Leu Ser Arg Lys Arg Ala Leu Trp Phe Ser Val Ser Asn
340 345 350
Asp Leu Lys Tyr Asp Ala Glu Arg Asp Leu Arg Asp Ile Gly Ala Lys
355 360 365
Asn Ile Leu Val His Ser Leu Asn Lys Phe Lys Tyr Gly Lys Ile Ser
370 375 380
Ser Lys His Asn Gly Ser Val Lys Lys Gly Val Ile Phe Ala Thr Tyr
385 390 395 400
Ser Ser Leu Ile Gly Glu Ser Gln Ser Gly Gly Lys Tyr Lys Thr Arg
405 410 415
Leu Lys Gln Leu Leu His Trp Cys Gly Asp Asp Phe Asp Gly Val Ile
420 425 430

0035303 - 0035305

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Val Phe Asp Glu Cys His Lys Ala Lys Asn Leu Cys Pro Val Gly Ser
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Ser Lys Pro Thr Lys Thr Gly Leu Ala Val Leu Glu Leu Gln Asn Lys
    450                 455                 460
Leu Pro Lys Ala Arg Val Val Tyr Ala Ser Ala Thr Gly Ala Ser Glu
465                 470                 475                 480
Pro Arg Asn Met Ala Tyr Met Asn Arg Leu Gly Ile Trp Gly Glu Gly
                485                 490                 495
Thr Pro Phe Arg Glu Phe Ser Asp Phe Ile Gln Ala Val Glu Arg Arg
            500                 505                 510
Gly Val Gly Ala Met Glu Ile Val Ala Met Asp Met Lys Leu Arg Gly
        515                 520                 525
Met Tyr Ile Ala Arg Gln Leu Ser Phe Thr Gly Val Thr Phe Lys Ile
    530                 535                 540
Glu Glu Val Leu Leu Ser Gln Ser Tyr Val Lys Met Tyr Asn Lys Ala
545                 550                 555                 560
Val Lys Leu Trp Val Ile Ala Arg Glu Arg Phe Gln Gln Ala Ala Asp
                565                 570                 575
Leu Ile Asp Ala Glu Gln Arg Met Lys Lys Ser Met Trp Gly Gln Phe
            580                 585                 590
Trp Ser Ala His Gln Arg Phe Phe Lys Tyr Leu Cys Ile Ala Ser Lys
        595                 600                 605
Val Lys Arg Val Val Gln Leu Ala Arg Glu Glu Ile Lys Asn Gly Lys
    610                 615                 620
Cys Val Val Ile Gly Leu Gln Ser Thr Gly Glu Ala Arg Thr Leu Glu
625                 630                 635                 640
Ala Leu Glu Glu Gly Gly Gly Glu Leu Asn Asp Phe Val Ser Thr Ala
                645                 650                 655
Lys Gly Val Leu Gln Ser Leu Ile Glu Lys His Phe Pro Ala Pro Asp
            660                 665                 670
Arg Lys Lys Leu Tyr Ser Leu Leu Gly Ile Asp Leu Thr Ala Pro Ser
        675                 680                 685
Asn Asn Ser Ser Pro Arg Asp Ser Pro Cys Lys Glu Asn Lys Ile Lys
    690                 695                 700
Lys Arg Lys Gly Glu Glu Ile Thr Arg Glu Ala Lys Lys Ala Arg Lys
705                 710                 715                 720
Val Gly Gly Leu Thr Gly Ser Ser Ser Asp Asp Ser Gly Ser Glu Ser
                725                 730                 735
Asp Ala Ser Asp Asn Glu Glu Ser Asp Tyr Glu Ser Ser Lys Asn Met
            740                 745                 750
Ser Ser Gly Asp Asp Asp Asp Phe Asn Pro Phe Leu Asp Glu Ser Asn
        755                 760                 765
Glu Asp Asp Glu Asn Asp Pro Trp Leu Ile Arg Lys Asp His
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<210> 12224
<211> 4358

<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (173)..(3097)

<400> 12224
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tggaaaatgt tttatctttc tatagaaagt tgggtacagt atgtaactgc gggaaaccca 4260
ctgccccttt gtaagctgtg gaacccaaac tgtatgggga tatttgatgt tttcagaaag 4320
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<210> 12225
<211> 975
<212> PRT
<213> Homo sapiens

<400> 12225
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20 25 30
Lys Gln Trp Glu Thr Gln Pro Gly Phe Tyr Ser Val Leu Leu Asn Ile
35 40 45
Phe Thr Asn His Thr Leu Asp Ile Asn Val Arg Trp Leu Ala Val Leu

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     50                  55                  60
Tyr Phe Lys His Gly Ile Asp Arg Tyr Trp Arg Arg Val Ala Pro His
 65                  70                  75                  80
Ala Leu Ser Glu Glu Glu Lys Thr Thr Leu Arg Ala Gly Leu Ile Thr
                 85                  90                  95
Asn Phe Asn Glu Pro Ile Asn Gln Ile Ala Thr Gln Ile Ala Val Leu
            100                 105                 110
Ile Ala Lys Val Ala Arg Leu Asp Cys Pro Arg Gln Trp Pro Glu Leu
        115                 120                 125
Ile Pro Thr Leu Ile Glu Ser Val Lys Val Gln Asp Asp Leu Arg Gln
    130                 135                 140
His Arg Ala Leu Leu Thr Phe Tyr His Val Thr Lys Thr Leu Ala Ser
145                 150                 155                 160
Lys Arg Leu Ala Ala Asp Arg Lys Leu Phe Tyr Asp Leu Ala Ser Gly
                165                 170                 175
Ile Tyr Asn Phe Ala Cys Ser Leu Trp Asn His His Thr Asp Thr Phe
            180                 185                 190
Leu Gln Glu Val Ser Ser Gly Asn Glu Ala Ala Thr Leu Ser Ser Leu
        195                 200                 205
Glu Arg Thr Leu Leu Ser Leu Lys Val Leu Arg Lys Leu Thr Val Asn
    210                 215                 220
Gly Phe Val Glu Pro His Lys Asn Met Glu Val Met Gly Phe Leu His
225                 230                 235                 240
Gly Ile Phe Glu Arg Leu Lys Gln Phe Leu Glu Cys Ser Arg Ser Ile
                245                 250                 255
Gly Thr Asp Asn Val Cys Arg Asp Arg Leu Glu Lys Thr Ile Ile Leu
            260                 265                 270
Phe Thr Lys Val Leu Leu Asp Phe Leu Asp Gln His Pro Phe Ser Phe
        275                 280                 285
Thr Pro Leu Ile Gln Arg Ser Leu Glu Phe Ser Val Ser Tyr Val Phe
    290                 295                 300
Thr Glu Val Gly Glu Gly Val Thr Phe Glu Arg Phe Ile Val Gln Cys
305                 310                 315                 320
Met Asn Leu Ile Lys Met Ile Val Lys Asn Tyr Ala Tyr Lys Pro Ser
                325                 330                 335
Lys Asn Phe Glu Asp Ser Ser Pro Glu Thr Leu Glu Ala His Lys Ile
            340                 345                 350
Lys Met Ala Phe Phe Thr Tyr Pro Thr Leu Thr Glu Ile Cys Arg Arg
        355                 360                 365
Leu Val Ser His Tyr Phe Leu Leu Thr Glu Glu Glu Leu Thr Met Trp
    370                 375                 380
Glu Glu Asp Pro Glu Gly Phe Thr Val Glu Glu Thr Gly Gly Asp Ser
385                 390                 395                 400
Trp Lys Tyr Ser Leu Arg Pro Cys Thr Glu Val Leu Phe Ile Asp Ile
                405                 410                 415
Phe His Glu Tyr Asn Gln Thr Leu Thr Pro Val Leu Leu Glu Met Met
            420                 425                 430
Gln Thr Leu Gln Gly Pro Thr Asn Val Glu Asp Met Asn Ala Leu Leu
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0050205 - 0050205

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        435                 440                 445
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Glu Leu Gln Val Ile His Asn Arg Tyr Lys Pro Leu Arg Arg Arg Val
                485                 490                 495
Ile Trp Leu Ile Gly Gln Trp Val Ser Val Lys Phe Lys Ser Asp Leu
            500                 505                 510
Arg Pro Met Leu Tyr Glu Ala Ile Cys Asn Leu Leu Gln Asp Gln Asp
        515                 520                 525
Leu Val Val Arg Ile Glu Thr Ala Thr Thr Leu Lys Leu Thr Val Asp
    530                 535                 540
Asp Phe Glu Phe Arg Thr Asp Gln Phe Leu Pro Tyr Leu Glu Thr Met
545                 550                 555                 560
Phe Thr Leu Leu Phe Gln Leu Leu Gln Gln Ala Thr Glu Cys Asp Thr
                565                 570                 575
Lys Met His Val Leu His Val Leu Ser Cys Val Ile Glu Arg Val Asn
            580                 585                 590
Met Gln Ile Arg Pro Tyr Val Gly Cys Leu Val Gln Tyr Leu Pro Leu
        595                 600                 605
Leu Trp Lys Gln Ser Glu Glu His Asn Met Leu Arg Cys Ala Ile Leu
    610                 615                 620
Thr Thr Leu Ile His Leu Val Gln Gly Leu Gly Ala Asp Ser Lys Asn
625                 630                 635                 640
Leu Tyr Pro Phe Leu Leu Pro Val Ile Gln Leu Ser Thr Asp Val Ser
                645                 650                 655
Gln Pro Pro His Val Tyr Leu Leu Glu Asp Gly Leu Glu Leu Trp Leu
            660                 665                 670
Val Thr Leu Glu Asn Ser Pro Cys Ile Thr Pro Glu Leu Leu Arg Ile
        675                 680                 685
Phe Gln Asn Met Ser Pro Leu Leu Glu Leu Ser Ser Glu Asn Leu Arg
    690                 695                 700
Thr Cys Phe Lys Ile Ile Asn Gly Tyr Ile Phe Leu Ser Ser Thr Glu
705                 710                 715                 720
Phe Leu Gln Thr Tyr Ala Val Gly Leu Cys Gln Ser Phe Cys Glu Leu
                725                 730                 735
Leu Lys Glu Ile Thr Thr Glu Gly Gln Val Gln Val Leu Lys Val Val
            740                 745                 750
Glu Asn Ala Leu Lys Val Asn Pro Ile Leu Gly Pro Gln Met Phe Gln
        755                 760                 765
Pro Ile Leu Pro Tyr Val Phe Lys Gly Ile Ile Glu Gly Glu Arg Tyr
    770                 775                 780
Pro Val Val Met Ser Thr Tyr Leu Gly Val Met Gly Arg Val Leu Leu
785                 790                 795                 800
Gln Asn Thr Ser Phe Phe Ser Ser Leu Leu Asn Glu Met Ala His Lys
                805                 810                 815
Phe Asn Gln Glu Met Asp Gln Leu Leu Gly Asn Met Ile Glu Met Trp
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0356305-0040

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            820                 825                 830
Val Asp Arg Met Asp Asn Ile Thr Gln Pro Glu Arg Arg Lys Leu Ser
        835                 840                 845
Ala Leu Ala Leu Leu Ser Leu Leu Pro Ser Asp Asn Ser Val Ile Gln
    850                 855                 860
Asp Lys Phe Cys Gly Ile Ile Asn Ile Ser Val Glu Gly Leu His Asp
865                 870                 875                 880
Val Met Thr Glu Asp Pro Glu Thr Gly Thr Tyr Lys Asp Cys Met Leu
                885                 890                 895
Met Ser His Leu Glu Glu Pro Lys Val Thr Glu Asp Glu Glu Pro Pro
            900                 905                 910
Thr Glu Gln Asp Lys Arg Lys Lys Met Leu Ala Leu Lys Asp Pro Val
        915                 920                 925
His Thr Val Ser Leu Gln Gln Phe Ile Tyr Glu Lys Leu Lys Ala Gln
    930                 935                 940
Gln Glu Met Leu Gly Glu Gln Gly Phe Gln Ser Leu Met Glu Thr Val
945                 950                 955                 960
Asp Thr Glu Ile Val Thr Gln Leu Gln Glu Phe Leu Gln Gly Phe
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<210> 12226
<211> 2940
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (12)..(743)

<400> 12226
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cagaggttta caggtcagaa aatgaaagtg aacggaactg tctagaagaa tcagagggct 180
gctattgcag atcatctgga gaccctgaac aaataaagga agacagttta tcagaagaga 240
gtgctgatgc acggagtttt gaaatgactg aattcaatca agctttagaa gaaataaaag 300
ggcaggttgt tgaaaacaac tctgtaactg aattttctga ggagaaaaac agaactgaaa 360
attacaacag gcaagatggt cagagagttc aaggaggagt ccctgctggc tctgacgagt 420
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cttcttcagg cagtgctgta agctgttcaa caattcctcc agaactggtg aaacagaagg 600
tgaaacgtca gttgacaaaa cagcaaaaat cagctgtcag acgtcgattg cagaaaggag 660
aagcaaatat atttaccaag caacgtaggg aaaacatgca aaatatcaaa tcaagtttgg 720
aagcagctag cttttgggga gaataatata tttaggatct tggatatgtt taatatattt 780
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0502015.0 - 05/20/2003
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<210> 12227
<211> 244
<212> PRT
<213> Homo sapiens

<400> 12227
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Asn Ile Glu Thr Lys Glu Gly Ser Glu Phe Ser Phe Ser Asp Gly Glu
20 25 30
Val Ala Glu Lys Ala Glu Val Tyr Arg Ser Glu Asn Glu Ser Glu Arg
35 40 45
Asn Cys Leu Glu Glu Ser Glu Gly Cys Tyr Cys Arg Ser Ser Gly Asp
50 55 60

09/25/2003 09:56:00 PM

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Pro Glu Gln Ile Lys Glu Asp Ser Leu Ser Glu Glu Ser Ala Asp Ala
 65                  70                  75                  80
Arg Ser Phe Glu Met Thr Glu Phe Asn Gln Ala Leu Glu Glu Ile Lys
                85                  90                  95
Gly Gln Val Val Glu Asn Asn Ser Val Thr Glu Phe Ser Glu Glu Lys
            100                 105                 110
Asn Arg Thr Glu Asn Tyr Asn Arg Gln Asp Gly Gln Arg Val Gln Gly
        115                 120                 125
Gly Val Pro Ala Gly Ser Asp Glu Tyr Glu Asp Glu Cys Pro His Leu
    130                 135                 140
Ile Ala Leu Ser Ser Leu Asn Arg Glu Phe Arg Pro Phe Arg Asp Glu
145                 150                 155                 160
Glu Asn Val Gly Ala Met Asn Gln Tyr Arg Thr Arg Thr Leu Ser Ile
                165                 170                 175
Thr Ser Ser Gly Ser Ala Val Ser Cys Ser Thr Ile Pro Pro Glu Leu
            180                 185                 190
Val Lys Gln Lys Val Lys Arg Gln Leu Thr Lys Gln Gln Lys Ser Ala
        195                 200                 205
Val Arg Arg Arg Leu Gln Lys Gly Glu Ala Asn Ile Phe Thr Lys Gln
    210                 215                 220
Arg Arg Glu Asn Met Gln Asn Ile Lys Ser Ser Leu Glu Ala Ala Ser
225                 230                 235                 240
Phe Trp Gly Glu
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<210> 12228
<211> 2761
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (339)..(2174)

<400> 12228

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aatttgatgc tgctgttaat tctggagaac tgtggtttgt aaatttttac tccccaggct 240
gttcacactg ccatgattta gctcccacat ggagagactt tgctaaagaa gtggatgggt 300
tacttcgaat tggagctgtt aactgtggtg atgatagaat gctttgccga atgaaaggag 360
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gagacagatc aaaggagagt ttagtgagtt ttgcaatgca gcatgttaga agtacagtga 480
cagaactttg gacaggaaat tttgtcaact ccatacaaac tgcttttgct gctggtattg 540
gctggctgat cacttttttgt tcaaaaggag gagattgttt gacttcacag acacgactca 600
ggcttggtgg catgttggat ggtcttgtta atgtaggatg gatggactgt gccacccagg 660
ataacctttg taaaagctta gatattacaa caagtactac tgcttatttt cctcctggag 720
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09529680.030900

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tagaggatcg tttggctcat catcggtggc tgttattttt tcattttgga aaaaatgaaa 900
attcaaatga tcctgagctg aaaaaactaa aaactctact taaaaatgat catattcaag 960
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<210> 12229
<211> 612
<212> PRT
<213> Homo sapiens

<400> 12229
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Phe Arg Ser Gly Met Ala Pro Val Lys Tyr His Gly Asp Arg Ser Lys
20 25 30
Glu Ser Leu Val Ser Phe Ala Met Gln His Val Arg Ser Thr Val Thr

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          35                  40                  45
Glu Leu Trp Thr Gly Asn Phe Val Asn Ser Ile Gln Thr Ala Phe Ala
     50                  55                  60
Ala Gly Ile Gly Trp Leu Ile Thr Phe Cys Ser Lys Gly Gly Asp Cys
 65                  70                  75                  80
Leu Thr Ser Gln Thr Arg Leu Arg Leu Gly Gly Met Leu Asp Gly Leu
                 85                  90                  95
Val Asn Val Gly Trp Met Asp Cys Ala Thr Gln Asp Asn Leu Cys Lys
            100                 105                 110
Ser Leu Asp Ile Thr Thr Ser Thr Thr Ala Tyr Phe Pro Pro Gly Ala
        115                 120                 125
Thr Leu Asn Asn Lys Glu Lys Asn Ser Ile Leu Phe Leu Asn Ser Leu
    130                 135                 140
Asp Ala Lys Glu Ile Tyr Leu Glu Val Ile His Asn Leu Pro Asp Phe
145                 150                 155                 160
Glu Leu Leu Ser Ala Asn Thr Leu Glu Asp Arg Leu Ala His His Arg
                165                 170                 175
Trp Leu Leu Phe Phe His Phe Gly Lys Asn Glu Asn Ser Asn Asp Pro
            180                 185                 190
Glu Leu Lys Lys Leu Lys Thr Leu Leu Lys Asn Asp His Ile Gln Val
        195                 200                 205
Gly Arg Phe Asp Cys Ser Ser Ala Pro Asp Ile Cys Ser Asn Leu Tyr
    210                 215                 220
Val Phe Gln Pro Ser Leu Ala Val Phe Lys Gly Gln Gly Thr Lys Glu
225                 230                 235                 240
Tyr Glu Ile His His Gly Lys Lys Ile Leu Tyr Asp Ile Leu Ala Phe
                245                 250                 255
Ala Lys Glu Ser Val Asn Ser His Val Thr Thr Leu Gly Pro Gln Asn
            260                 265                 270
Phe Pro Ala Asn Asp Lys Glu Pro Trp Leu Val Asp Phe Phe Ala Pro
        275                 280                 285
Trp Cys Pro Pro Cys Arg Ala Leu Leu Pro Glu Leu Arg Arg Ala Ser
    290                 295                 300
Asn Leu Leu Tyr Gly Gln Leu Lys Phe Gly Thr Leu Asp Cys Thr Val
305                 310                 315                 320
His Glu Gly Leu Cys Asn Met Tyr Asn Ile Gln Ala Tyr Pro Thr Thr
                325                 330                 335
Val Val Phe Asn Gln Ser Asn Ile His Glu Tyr Glu Gly His His Ser
            340                 345                 350
Ala Glu Gln Ile Leu Glu Phe Ile Glu Asp Leu Met Asn Pro Ser Val
        355                 360                 365
Val Ser Leu Thr Pro Thr Thr Phe Asn Glu Leu Val Thr Gln Arg Lys
    370                 375                 380
His Asn Glu Val Trp Met Val Asp Phe Tyr Ser Pro Trp Cys His Pro
385                 390                 395                 400
Cys Gln Val Leu Met Pro Glu Trp Lys Arg Met Ala Arg Thr Leu Thr
                405                 410                 415
Gly Leu Ile Asn Val Gly Ser Ile Asp Cys Gln Gln Tyr His Ser Phe
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0050250 - 05-NOV-2008

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            420                 425                 430
Cys Ala Gln Glu Asn Val Gln Arg Tyr Pro Glu Ile Arg Phe Phe Pro
        435                 440                 445
Pro Lys Ser Asn Lys Ala Tyr Gln Tyr His Ser Tyr Asn Gly Trp Asn
    450                 455                 460
Arg Asp Ala Tyr Ser Leu Arg Ile Trp Gly Leu Gly Phe Leu Pro Gln
465                 470                 475                 480
Val Ser Thr Asp Leu Thr Pro Gln Thr Phe Ser Glu Lys Val Leu Gln
                485                 490                 495
Gly Lys Asn His Trp Val Ile Asp Phe Tyr Ala Pro Trp Cys Gly Pro
            500                 505                 510
Cys Gln Asn Phe Ala Pro Glu Phe Glu Leu Leu Ala Arg Met Ile Lys
        515                 520                 525
Gly Lys Val Lys Ala Gly Lys Val Asp Cys Gln Ala Tyr Ala Gln Thr
    530                 535                 540
Cys Gln Lys Ala Gly Ile Arg Ala Tyr Pro Thr Val Lys Phe Tyr Phe
545                 550                 555                 560
Tyr Glu Arg Ala Lys Arg Asn Phe Gln Glu Glu Gln Ile Asn Thr Arg
                565                 570                 575
Asp Ala Lys Ala Ile Ala Ala Leu Ile Ser Glu Lys Leu Glu Thr Leu
            580                 585                 590
Arg Asn Gln Ala Arg Gly Ile Arg Met Asn Phe Asp Asn Val Glu Asp
        595                 600                 605
Glu Glu Lys Val
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<210> 12230
<211> 2678
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (15)..(1538)

<400> 12230
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aaaataatgt acttttcgg gatgatatag aatgtcagaa actcattatg gaagcaatga 600
agtaccattt attaccagag agacgaccca tgttacaaag tcctcggaca aaacctagga 660

0060-0060-0060

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<212> PRT
<213> Homo sapiens

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Tyr Thr Met Glu His Phe Met Glu Val Ile Arg Asn Gln Glu Phe Val
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Tyr Ile Arg Leu Pro Leu Leu Ala Pro Gln Phe Leu Ala Asp Met Glu
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Glu Ala Met Lys Tyr His Leu Leu Pro Glu Arg Arg Pro Met Leu Gln
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Ser Pro Arg Thr Lys Pro Arg Lys Ser Thr Val Gly Thr Leu Phe Ala
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Val Gly Gly Met Asp Ser Thr Lys Gly Ala Thr Ser Ile Glu Lys Tyr
225                 230                 235                 240
Asp Leu Arg Thr Asn Met Trp Thr Pro Val Ala Asn Met Asn Gly Arg
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Arg Leu Gln Phe Gly Val Ala Val Leu Asp Asp Lys Leu Tyr Val Val
            260                 265                 270
Gly Gly Arg Asp Gly Leu Lys Thr Leu Asn Thr Val Glu Cys Tyr Asn
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Pro Lys Thr Lys Thr Trp Ser Val Met Pro Pro Met Ser Thr His Arg
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Gln Ala Arg Gln Trp Asn Phe Val Ala Thr Lys Ser Thr Pro Arg Ser
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Thr Val Gly Val Ala Val Leu Ser Gly Lys Leu Tyr Ala Val Gly Gly
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Arg Asp Gly Ser Ser Cys Leu Lys Ser Val Glu Cys Phe Asp Pro His
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Thr Asn Lys Trp Thr Leu Cys Ala Gln Met Ser Lys Arg Arg Gly Gly
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Val Gly Val Thr Thr Trp Asn Gly Leu Leu Tyr Ala Ile Gly Gly His
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caatatcatc aagaaataga ggaatttgta tcaaatttag taaaaagatt tgaggaacag 480
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<212> PRT
<213> Homo sapiens

<400> 12233

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		35					40					45			
Leu	Arg	Glu	Arg	Leu	Arg	Gln	Cys	Glu	Glu	Thr	Ile	Glu	Gln	Leu	Arg
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Ser	Gly	Ile	Leu	Val	Asn	Asp	Thr	Lys	Leu	Asp	Gly	Pro	Ile	Leu	Gln
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210 215 220
Pro Lys Pro His Cys Phe Asn Cys Gly Ser Glu Glu His Gln Met Lys
225 230 235 240
Asp Cys Pro Met Pro Arg Asn Ala Ala Arg Ile Ser Glu Lys Arg Lys
245 250 255
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260 265 270
Arg Tyr His Ala Glu Glu Val Glu Glu Arg Phe Gly Arg Phe Lys Pro
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Gly Trp Leu Lys Glu Ala Glu Leu Glu Asn Ser Gly Leu Ala Leu Tyr
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Asp Gly Lys Asp Gly Thr Asp Gly Glu Thr Glu Val Gly Glu Ile Gln
340 345 350
Gln Asn Lys Ser Val Thr Tyr Asp Leu Ser Lys Leu Val Asn Tyr Pro
355 360 365
Gly Phe Asn Ile Ser Thr Pro Arg Gly Ile Pro Asp Glu Trp Arg Ile
370 375 380
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385 390 395 400
Asn Tyr Leu Thr Ser Asn Phe Gln Ala Pro Gly Val Lys Ser Gly Asn
405 410 415
Lys Arg Ser Ser Ser His Ser Ser Pro Gly Ser Pro Lys Lys Gln Lys
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Ala Ala Leu Glu Gln Ala Glu Ser Val Asn Ser Asp Ser Asp Val Pro
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Val Asp Thr Pro Leu Thr Gly Asn Ser Val Ala Ser Ser Pro Cys Pro
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0950350 - 0950350

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Thr Leu Asp Glu Pro Glu Val Pro Glu Ile Phe Thr Lys Lys Ser Glu
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595 600 605
Lys Glu Lys Ala Glu Leu Ala Pro Val Asn Thr Glu Gly Ala Leu Leu
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Asp Asn Gly Ser Val Val Pro Asn Cys Asp Ile Ser Asn Gly Gly Ser
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Gln Lys Leu Phe Pro Ala Asp Thr Ser Pro Ser Thr Ala Thr Lys Ile
645 650 655
His Ser Pro Ile Pro Asp Met Ser Lys Phe Ala Thr Gly Ile Thr Pro
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Phe Glu Phe Glu Asn Met Ala Glu Ser Thr Gly Met Tyr Leu Arg Ile
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35 40 45
Gly Thr Asp Tyr Ile Arg Phe Thr Glu Phe Ile Glu Gln Tyr Thr Gly
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His Val Gln Gln Gln Asp His His Pro Ser Gln Gln Gly Gln Gly Gly
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Leu His Gly Ile Tyr Leu Arg Ala Phe Cys Thr Gly Leu Asp Ser Val
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Ser Cys Gly Gly Leu Pro Pro Val Arg Ser Ala Leu Glu Lys Ile Leu
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His Gly Leu Leu Leu Asp Gln His Glu Glu Phe Phe Ile Lys Gln Gly
        195                 200                 205
Pro Ser Ser Gly Asn Val Ser Ala Gln Pro Glu Glu Asp Glu Glu Asp
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225                 230                 235                 240
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Gln Asn Val Asn Leu Thr Arg Lys Gly Ser Ile Leu Lys Asn Gln Glu
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Asp Thr Phe Ala Ala Glu Leu His Arg Leu Lys Gln Gln Pro Leu Phe
305                 310                 315                 320
Ser Leu Val Asp Phe Glu Gln Val Val Asp Arg Ile Arg Ser Thr Val
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Gln Leu Lys Ile Ile Lys Asp Phe Tyr Leu Leu Gly Arg Gly Glu Leu
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Thr Trp Lys Tyr Tyr Ala Lys Lys Ile Leu Tyr Tyr Leu Arg Gln Gln
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Glu Ser Tyr Leu Glu Gly Ala Val Tyr Ile Asp Gln Tyr Cys Asn Pro
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Val Glu Val Lys Leu Arg Ser Asp Glu Lys His Arg Asp Val Cys Tyr
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Ser Ile Gly Leu Ile Met Lys His Lys Arg Tyr Gly Tyr Asn Cys Val
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Ile Tyr Gly Trp Asp Pro Thr Cys Met Met Gly His Glu Trp Ile Arg
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Thr Asn Ile Glu Asp Lys Thr Gly Leu Trp Tyr Leu Asn Gly Asn Tyr
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115 120 125
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US 2003/0186290 A1

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Ser Val Gln Lys Ile Gly Ala Leu Phe Phe Leu Leu Ser Gly Val Leu
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Gln Leu Gln Gln Pro Gln Gln Thr Leu Leu Thr Gln Pro Ala Val Ala
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Leu Pro Thr Ser Leu Ser Leu Ser Thr Pro Gln Pro Thr Ala Gln Ile
        115                 120                 125
Thr Val Ser Tyr Pro Thr Pro Arg Ser Ser Gln Gln Gln Thr Gln Pro
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Gln Lys Gln Arg Val Phe Thr Gly Val Val Thr Lys Leu His Asp Thr
145                 150                 155                 160
Phe Gly Phe Val Asp Glu Asp Val Phe Phe Gln Leu Ser Ala Val Lys
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Gly Lys Thr Pro Gln Val Gly Asp Arg Val Leu Val Glu Ala Thr Tyr
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Pro Asn Gln Asn Gln Ser Gln Thr Gln Pro Leu Leu Lys Thr Pro Pro
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Gln Gln Lys Ala Gly Leu Leu Gln Pro Pro Val Arg Ile Val Ser Gln
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Pro Gln Pro Ala Arg Arg Leu Asp Pro Pro Ser Arg Phe Ser Gly Arg
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Glu Arg Glu Arg Glu Arg Arg Arg Ser Arg Glu Arg Ser Pro Gln Arg
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Ala Met Ala Ile Gly Gly His Trp Ser Pro Ser Leu Asp Gly Pro Asp
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Pro Glu Lys Asp Pro Ser Val Leu Ile Lys Thr Ala Ile Arg Cys Cys
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Trp His Cys Leu Pro Thr Arg Ser Glu Trp Glu Thr Leu Ser Arg Gly
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Tyr Lys Gln Gln Leu Val Glu Lys Leu Gln Gly Glu Arg Lys Glu Ala
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Glu Asp Glu Asp Asp Asp Arg Lys Ser Glu Asp Asp Lys Glu Glu Glu
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Glu Arg Lys Arg Gln Glu Glu Ile Glu Arg Gln Arg Arg Glu Arg Arg
705                 710                 715                 720
Tyr Ile Leu Pro Asp Glu Pro Ala Ile Ile Val His Pro Asn Trp Ala
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Leu Asp Tyr Arg Leu Glu Asp Asn Lys Glu His Ser Phe Glu Val Ser
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<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

<400> 12243

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<212> DNA
<213> Homo sapiens

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<222> (157)..(1131)

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Ile Met Thr Arg Leu Tyr Lys Tyr Val Phe Cys Pro Glu Thr Thr Asp
50 55 60
Asp Glu Lys Lys Asp Leu Ala Ile Gln Lys Arg Ile Arg Ala Leu Arg
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225                 230                 235                 240
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            260                 265                 270
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        275                 280                 285
Lys Tyr Pro Leu Glu Ile Lys Pro Pro Asn Gln Pro Leu Ala Ala Ile
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<211> 158
<212> PRT
<213> Homo sapiens

<400> 12247

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Asp Glu Leu Pro Arg Leu Phe Cys Ser Val Ser Leu Leu Thr Asn Phe
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Glu Asp Val Cys Asp Tyr Leu Asp Trp Glu Val Gly Val His Gly Ile
    50                  55                  60
Arg Ile Glu Phe Ile Asn Glu Lys Gly Ser Lys Arg Thr Ala Thr Tyr
65                  70                  75                  80
Leu Pro Glu Val Ala Lys Glu Gln Gly Trp Asp His Ile Gln Thr Ile
                85                  90                  95
Asp Ser Leu Leu Arg Lys Gly Gly Tyr Lys Ala Pro Ile Thr Asn Glu
            100                 105                 110
Phe Arg Lys Thr Ile Lys Leu Thr Arg Tyr Arg Ser Glu Lys Met Thr
        115                 120                 125
Leu Ser Tyr Ala Glu Tyr Leu Ala His Arg Gln His His His Phe Gln
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Asn Gly Ile Gly His Pro Leu Pro Pro Tyr Asn His Tyr Ser
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<211> 2647
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (40)..(1305)

<400> 12248
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tggctctatg gaaaacactg tgataacctc ctaaggagag cagcctgtca agaagctcag 180
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cccattggat ttatcccact gggagagacc agtagtttga gtcataccct ctttgccgaa 540
agtggaaaca aagtccaaca tattactgat gccacacttg ccattgtgaa aggagagaca 600
gttccacttg atgtcttgca gatcaagggt gaaaaggaac agcctgtatt tgcaatgacc 660
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<211> 422
<212> PRT
<213> Homo sapiens

<400> 12249
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His Cys Asp Asn Leu Leu Arg Arg Ala Ala Cys Gln Glu Ala Gln Val
35 40 45
Phe Gly Asn Gln Leu Ile Pro Pro Asn Ala Gln Val Lys Lys Ala Thr
50 55 60
Val Phe Leu Asn Pro Ala Ala Cys Lys Gly Lys Ala Arg Thr Leu Phe
65 70 75 80
Glu Lys Asn Ala Ala Pro Ile Leu His Leu Ser Gly Met Asp Val Thr

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                    85                  90                  95
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            100                 105                 110
Met Glu Asn Thr Asp Val Ile Ile Val Ala Gly Gly Asp Gly Thr Leu
        115                 120                 125
Gln Glu Val Val Thr Gly Val Leu Arg Arg Thr Asp Glu Ala Thr Phe
    130                 135                 140
Ser Lys Ile Pro Ile Gly Phe Ile Pro Leu Gly Glu Thr Ser Ser Leu
145                 150                 155                 160
Ser His Thr Leu Phe Ala Glu Ser Gly Asn Lys Val Gln His Ile Thr
                165                 170                 175
Asp Ala Thr Leu Ala Ile Val Lys Gly Glu Thr Val Pro Leu Asp Val
            180                 185                 190
Leu Gln Ile Lys Gly Glu Lys Glu Gln Pro Val Phe Ala Met Thr Gly
        195                 200                 205
Leu Arg Trp Gly Ser Phe Arg Asp Ala Gly Val Lys Val Ser Lys Tyr
    210                 215                 220
Trp Tyr Leu Gly Pro Leu Lys Ile Lys Ala Ala His Phe Phe Ser Thr
225                 230                 235                 240
Leu Lys Glu Trp Pro Gln Thr His Gln Ala Ser Ile Ser Tyr Thr Gly
                245                 250                 255
Pro Thr Glu Arg Pro Pro Asn Glu Pro Glu Glu Thr Pro Val Gln Arg
            260                 265                 270
Pro Ser Leu Tyr Arg Arg Ile Leu Arg Arg Leu Ala Ser Tyr Trp Ala
        275                 280                 285
Gln Pro Gln Asp Ala Leu Ser Gln Glu Val Ser Pro Glu Val Trp Lys
    290                 295                 300
Asp Val Gln Leu Ser Thr Ile Glu Leu Ser Ile Thr Thr Arg Asn Asn
305                 310                 315                 320
Gln Leu Asp Pro Thr Ser Lys Glu Asp Phe Leu Asn Ile Cys Ile Glu
                325                 330                 335
Pro Asp Thr Ile Ser Lys Gly Asp Phe Ile Thr Ile Gly Ser Arg Lys
            340                 345                 350
Val Arg Asn Pro Lys Leu His Val Glu Gly Thr Glu Cys Leu Gln Ala
        355                 360                 365
Ser Gln Cys Thr Leu Leu Ile Pro Glu Gly Ala Gly Gly Ser Phe Ser
    370                 375                 380
Ile Asp Ser Glu Glu Tyr Glu Ala Met Pro Val Glu Val Lys Leu Leu
385                 390                 395                 400
Pro Arg Lys Leu Gln Phe Phe Cys Asp Pro Arg Lys Arg Glu Gln Met
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<211> 2681
<212> DNA

0050-0050-0050

<213> Homo sapiens

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<210> 12251
<211> 412
<212> PRT
<213> Homo sapiens

<400> 12251
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Pro Ala Gly Arg His Pro Pro Val Val Leu Val Pro Gly Asp Leu Gly
35 40 45
Asn Gln Leu Glu Ala Lys Leu Asp Lys Pro Thr Val Val His Tyr Leu
50 55 60
Cys Ser Lys Lys Thr Glu Ser Tyr Phe Thr Ile Trp Leu Asn Leu Glu
65 70 75 80
Leu Leu Leu Pro Val Ile Ile Asp Cys Trp Ile Asp Asn Ile Arg Leu
85 90 95
Val Tyr Asn Lys Thr Ser Arg Ala Thr Gln Phe Pro Asp Gly Val Asp
100 105 110
Val Arg Val Pro Gly Phe Gly Lys Thr Phe Ser Leu Glu Phe Leu Asp
115 120 125
Pro Ser Lys Ser Ser Val Gly Ser Tyr Phe His Thr Met Val Glu Ser
130 135 140
Leu Val Gly Trp Gly Tyr Thr Arg Gly Glu Asp Val Arg Gly Ala Pro
145 150 155 160
Tyr Asp Trp Arg Arg Ala Pro Asn Glu Asn Gly Pro Tyr Phe Leu Ala
165 170 175
Leu Arg Glu Met Ile Glu Glu Met Tyr Gln Leu Tyr Gly Gly Pro Val
180 185 190
Val Leu Val Ala His Ser Met Gly Asn Met Tyr Thr Leu Tyr Phe Leu
195 200 205
Gln Arg Gln Pro Gln Ala Trp Lys Asp Lys Tyr Ile Arg Ala Phe Val
210 215 220
Ser Leu Gly Ala Pro Trp Gly Gly Val Ala Lys Thr Leu Arg Val Leu
225 230 235 240
Ala Ser Gly Asp Asn Asn Arg Ile Pro Val Ile Gly Pro Leu Lys Ile
245 250 255
Arg Glu Gln Gln Arg Ser Ala Val Ser Thr Ser Trp Leu Leu Pro Tyr
260 265 270
Asn Tyr Thr Trp Ser Pro Glu Lys Val Phe Val Gln Thr Pro Thr Ile
275 280 285

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Asn Tyr Thr Leu Arg Asp Tyr Arg Lys Phe Phe Gln Asp Ile Gly Phe
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Glu Asp Gly Trp Leu Met Arg Gln Asp Thr Glu Gly Leu Val Glu Ala
305                 310                 315                 320
Thr Met Pro Pro Gly Val Gln Leu His Cys Leu Tyr Gly Thr Gly Val
                325                 330                 335
Pro Thr Pro Asp Ser Phe Tyr Tyr Glu Ser Phe Pro Asp Arg Asp Pro
            340                 345                 350
Lys Ile Cys Phe Gly Asp Gly Asp Gly Thr Val Asn Leu Lys Ser Ala
        355                 360                 365
Leu Gln Cys Gln Ala Trp Gln Ser Arg Gln Glu His Gln Val Leu Leu
    370                 375                 380
Gln Glu Leu Pro Gly Ser Glu His Ile Glu Met Leu Ala Asn Ala Thr
385                 390                 395                 400
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<212> DNA
<213> Homo sapiens

<220>
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<211> 551
<212> PRT
<213> Homo sapiens

<400> 12253

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Lys Leu Lys Ala Ile Thr Ser Lys Ser Lys Glu Asp Arg Gln Lys Leu
35 40 45
Leu Lys Leu Glu Val Asp Phe Glu His Lys Ala Ser Arg Phe Ser Gln
50 55 60
Glu His Glu Glu Met Asn Ala Lys Leu Ala Asn Gln Glu Ser His Asn
65 70 75 80
Arg Gln Leu Arg Leu Lys Leu Val Gly Leu Thr Gln Arg Ile Glu Glu
85 90 95
Leu Glu Glu Thr Asn Lys Asn Leu Gln Lys Ala Glu Glu Glu Leu Gln
100 105 110
Glu Leu Arg Asp Lys Ile Ala Lys Gly Glu Cys Gly Asn Ser Ser Leu
115 120 125
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130 135 140
Lys Asp Glu Glu Ile Thr Lys Thr Glu Ser Gln Cys Arg Glu Leu Arg
145 150 155 160
Lys Lys Leu Gln Glu Glu Glu His His Ser Lys Glu Leu Arg Leu Glu
165 170 175
Val Glu Lys Leu Gln Lys Arg Met Ser Glu Leu Glu Lys Leu Glu Glu
180 185 190
Ala Phe Ser Lys Ser Lys Ser Glu Cys Thr Gln Leu His Leu Asn Leu
195 200 205
Glu Lys Glu Lys Asn Leu Thr Lys Asp Leu Leu Asn Glu Leu Glu Val
210 215 220
Val Lys Ser Arg Val Lys Glu Leu Glu Cys Ser Glu Ser Arg Leu Glu
225 230 235 240
Lys Ala Glu Leu Ser Leu Lys Asp Asp Leu Thr Lys Leu Lys Ser Phe
245 250 255
Thr Val Met Leu Val Asp Glu Arg Lys Asn Met Met Glu Lys Ile Lys
260 265 270
Gln Glu Glu Arg Lys Val Asp Gly Leu Asn Lys Asn Phe Lys Val Glu
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Gln Gly Lys Val Met Asp Val Thr Glu Lys Leu Ile Glu Glu Ser Lys
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Lys Leu Leu Lys Leu Lys Ser Glu Met Glu Glu Lys Val Tyr Asn Leu
305 310 315 320
Thr Arg Glu Arg Asp Glu Leu Ile Gly Lys Leu Lys Ser Glu Glu Glu
325 330 335
Lys Ser Ser Glu Leu Ser Cys Ser Val Asp Leu Leu Lys Lys Arg Leu
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Asp Gly Ile Glu Glu Val Glu Arg Glu Ile Thr Arg Gly Arg Ser Arg
355 360 365
Lys Gly Ser Glu Leu Thr Cys Pro Glu Asp Asn Lys Ile Lys Glu Leu
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Val Glu Gly Asp Leu Met Lys Thr Glu Asp Glu Tyr Asp Gln Leu Glu
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Gln Lys Phe Arg Thr Glu Gln Asp Lys Ala Asn Phe Leu Ser Gln Gln
            420                 425                 430
Leu Glu Glu Ile Lys His Gln Ile Ala Lys Asn Lys Ala Ile Glu Lys
        435                 440                 445
Gly Glu Val Val Ser Gln Glu Ala Glu Leu Arg His Arg Phe Arg Leu
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Glu Glu Ala Lys Ser Arg Asp Leu Lys Ala Gly Val Gln Ala Leu Lys
465                 470                 475                 480
Glu Lys Ile His Glu Leu Met Asn Lys Glu Asp Gln Leu Ser Gln Leu
                485                 490                 495
Gln Val Asp Tyr Ser Val Leu Gln Gln Arg Phe Met Glu Glu Glu Asn
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Lys Asn Lys Asn Met Gly Gln Glu Val Leu Asn Leu Thr Lys Glu Leu
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<213> Homo sapiens

<220>
<221> CDS
<222> (142)..(693)

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<211> 184
<212> PRT
<213> Homo sapiens

<400> 12255
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Gln Leu Thr Ala Leu Pro Ala Leu Glu Thr Ile Asn Leu Glu Glu Asn
 65                  70                  75                  80
Glu Ile Val Asp Val Pro Val Glu Lys Leu Ala Ala Met Pro Ala Leu
                 85                  90                  95
Arg Ser Ile Asn Leu Arg Phe Asn Pro Leu Asn Ala Glu Val Arg Val
            100                 105                 110
Ile Ala Pro Pro Leu Ile Lys Phe Asp Met Leu Met Ser Pro Glu Gly
        115                 120                 125
Ala Arg Ala Pro Leu Pro Tyr Ala Thr Leu Leu Met Pro Thr Gln Gln
    130                 135                 140
Gly Thr Glu Ala Thr Gly Leu Glu Pro Trp Lys Gly Gly Arg Pro Met
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Trp Val Gly Cys Ser Trp Ser Gly
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<210> 12256
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (138)..(1367)

<400> 12256

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atgctgtgag gggtgacggt ggcaaggtgg agtgtttcat tgggagcaca ccacccccag 360
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<210> 12257
<211> 410
<212> PRT
<213> Homo sapiens

<400> 12257

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			20					25					30		
Val	Ala	Glu	Arg	Glu	Val	Pro	Leu	Tyr	Val	Asn	Gly	Pro	Pro	Ile	Ile
		35					40					45			
Ser	Ser	Glu	Ala	Val	Gln	Tyr	Ala	Val	Arg	Gly	Asp	Gly	Gly	Lys	Val
	50					55					60				
Glu	Cys	Phe	Ile	Gly	Ser	Thr	Pro	Pro	Pro	Asp	Arg	Ile	Ala	Trp	Ala
65					70					75					80
Trp	Lys	Glu	Asn	Phe	Leu	Glu	Val	Gly	Thr	Leu	Glu	Arg	Tyr	Thr	Val
				85					90					95	
Glu	Arg	Thr	Asn	Ser	Gly	Ser	Gly	Val	Leu	Ser	Thr	Leu	Thr	Ile	Asn
			100					105					110		
Asn	Val	Met	Glu	Ala	Asp	Phe	Gln	Thr	His	Tyr	Asn	Cys	Thr	Ala	Trp
		115					120					125			
Asn	Ser	Phe	Gly	Pro	Gly	Thr	Ala	Ile	Ile	Gln	Leu	Glu	Glu	Arg	Glu
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                165                 170                 175
Arg Lys Gly Ser Arg Lys Asp Val Thr Leu Arg Lys Leu Asp Ile Lys
            180                 185                 190
Val Glu Thr Val Asn Arg Glu Pro Leu Thr Met His Ser Asp Arg Glu
        195                 200                 205
Asp Asp Thr Ala Ser Val Ser Thr Ala Thr Arg Val Met Lys Ala Ile
    210                 215                 220
Tyr Ser Ser Phe Lys Asp Asp Val Asp Leu Lys Gln Asp Leu Arg Cys
225                 230                 235                 240
Asp Thr Ile Asp Thr Arg Glu Glu Tyr Glu Met Lys Asp Pro Thr Asn
                245                 250                 255
Gly Tyr Tyr Asn Val Arg Ala His Glu Asp Arg Pro Ser Ser Arg Ala
            260                 265                 270
Val Leu Tyr Ala Asp Tyr Arg Ala Pro Gly Pro Ala Arg Phe Asp Gly
        275                 280                 285
Arg Pro Ser Ser Arg Leu Ser His Ser Ser Gly Tyr Ala Gln Leu Asn
    290                 295                 300
Thr Tyr Ser Arg Gly Pro Ala Ser Asp Tyr Gly Pro Glu Pro Thr Pro
305                 310                 315                 320
Pro Gly Pro Ala Ala Pro Ala Gly Thr Asp Thr Thr Ser Gln Leu Ser
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Tyr Glu Asn Tyr Glu Lys Phe Asn Ser His Pro Phe Pro Gly Ala Ala
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Gly Tyr Pro Thr Tyr Arg Leu Gly Tyr Pro Gln Ala Pro Pro Ser Gly
        355                 360                 365
Leu Glu Arg Thr Pro Tyr Glu Ala Tyr Asp Pro Ile Gly Lys Tyr Ala
    370                 375                 380
Thr Ala Thr Arg Phe Ser Tyr Thr Ser Gln His Ser Asp Tyr Gly Gln
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<212> DNA
<213> Homo sapiens

<220>
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<222> (513)..(1826)

<400> 12258
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0050205 - 0050806

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<211> 438
<212> PRT
<213> Homo sapiens

<400> 12259
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35 40 45
Trp Phe Ile Ala Gly Ile Phe Leu Leu Leu Thr Ile Pro Ile Ser Leu
50 55 60
Trp Val Ile Leu Gln His Leu Val His Tyr Thr Gln Pro Glu Leu Gln
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Lys Pro Ile Ile Arg Ile Leu Trp Met Val Pro Ile Tyr Ser Leu Asp
85 90 95
Ser Trp Ile Ala Leu Lys Tyr Pro Gly Ile Ala Ile Tyr Val Asp Thr
100 105 110
Cys Arg Glu Cys Tyr Glu Ala Tyr Val Ile Tyr Asn Phe Met Gly Phe
115 120 125
Leu Thr Asn Tyr Leu Thr Asn Arg Tyr Pro Asn Leu Val Leu Ile Leu
130 135 140
Glu Ala Lys Asp Gln Gln Lys His Phe Pro Pro Leu Cys Cys Cys Pro
145 150 155 160
Pro Trp Ala Met Gly Glu Val Leu Leu Phe Arg Cys Lys Leu Gly Val
165 170 175
Leu Gln Tyr Thr Val Val Arg Pro Phe Thr Thr Ile Val Ala Leu Ile
180 185 190
Cys Glu Leu Leu Gly Ile Tyr Asp Glu Gly Asn Phe Ser Phe Ser Asn
195 200 205
Ala Trp Thr Tyr Leu Val Ile Ile Asn Asn Met Ser Gln Leu Phe Ala
210 215 220
Met Tyr Cys Leu Leu Leu Phe Tyr Lys Val Leu Lys Glu Glu Leu Ser
225 230 235 240
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245 250 255
Val Ser Phe Trp Gln Ala Val Val Ile Ala Leu Leu Val Lys Val Gly
260 265 270
Val Ile Ser Glu Lys His Thr Trp Glu Trp Gln Thr Val Glu Ala Val
275 280 285
Ala Thr Gly Leu Gln Asp Phe Ile Ile Cys Ile Glu Met Phe Leu Ala
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Ala Glu Glu Gly Ser Cys Phe Asp Ser Phe Leu Ala Met Trp Asp Val

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Thr Val Gly Gly His Pro Arg Lys Lys Leu Phe Pro Glu Asp Gln Asp
        355                 360                 365
Gln Asn Glu His Thr Ser Leu Leu Ser Ser Ser Ser Gln Asp Ala Ile
    370                 375                 380
Ser Ile Ala Ser Ser Met Pro Pro Ser Pro Met Gly His Tyr Gln Gly
385                 390                 395                 400
Phe Gly His Thr Val Thr Pro Gln Thr Thr Pro Thr Thr Ala Lys Ile
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<212> DNA
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<213> Homo sapiens

<400> 12261

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         35                  40                  45
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Val Gly Cys Tyr Val Ala Ser Arg Pro Leu Thr Lys Asp Ser Asn Tyr
 65                  70                  75                  80
Phe Glu Val Ser Ile Val Asp Ser Gly Val Arg Gly Thr Ile Ala Val
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Gly Leu Val Pro Gln Tyr Tyr Ser Leu Asp His Gln Pro Gly Trp Leu
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Arg Ala Lys Gly Arg Gln Phe Gly Ser Lys Cys Asn Ser Gly Asp Arg
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Ser Val Met Met Val Asp Ser Tyr Glu Asp Glu Trp Gly Arg Leu His
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Asp Val Arg Val Cys Gly Thr Leu Leu Glu Tyr Leu Gly Lys Gly Lys
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Arg Ser His Tyr Phe Glu Val Glu Ile Val Asp Pro Gly Glu Lys Cys
            260                 265                 270
Tyr Ile Ala Leu Gly Leu Ala Arg Lys Asp Tyr Pro Lys Asn Arg His
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Pro Gly Trp Ser Arg Gly Ser Val Ala Tyr His Ala Asp Asp Gly Lys
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Ile Phe His Gly Ser Gly Val Gly Asp Pro Phe Gly Pro Arg Cys Tyr
305                 310                 315                 320
Lys Gly Asp Ile Met Gly Cys Gly Ile Met Phe Pro Arg Asp Tyr Ile
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Leu Asp Ser Glu Gly Asp Ser Asp Asp Ser Cys Asp Thr Val Ile Leu
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Ser Pro Thr Ala Arg Ala Val Arg Asn Val Arg Asn Val Met Tyr Leu
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His Gln Glu Gly Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Asp
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Gly Glu Glu Ile Glu Pro Glu His Glu Gly Arg Lys Val Val Val Phe
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Phe Thr Arg Asn Gly Lys Ile Ile Gly Lys Lys Asp Ala Val Val Pro
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<212> DNA
<213> Homo sapiens

<220>
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0501050-0501600

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<212> PRT
<213> Homo sapiens

<400> 12263
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35 40 45
Gln Leu Met Val Phe Leu Ile Ser Phe Ile Ser Ser Val Phe Cys Gly
50 55 60
His Leu Gly Lys Leu Glu Leu Asp Ala Val Thr Leu Ala Ile Ala Val
65 70 75 80
Ile Asn Val Thr Gly Val Ser Val Gly Phe Gly Leu Ser Ser Ala Cys
85 90 95
Asp Thr Leu Ile Ser Gln Thr Tyr Gly Ser Gln Asn Leu Lys His Val
100 105 110
Gly Val Ile Leu Gln Arg Ser Ala Leu Val Leu Leu Leu Cys Cys Phe
115 120 125
Pro Cys Trp Ala Leu Phe Leu Asn Thr Gln His Ile Leu Leu Leu Phe
130 135 140
Arg Gln Asp Pro Asp Val Ser Arg Leu Thr Gln Thr Tyr Val Thr Ile
145 150 155 160
Phe Ile Pro Ala Leu Pro Ala Thr Phe Leu Tyr Met Leu Gln Val Lys
165 170 175
Tyr Leu Leu Asn Gln Gly Ile Val Leu Pro Gln Ile Val Thr Gly Val
180 185 190
Ala Ala Asn Leu Val Asn Ala Leu Ala Asn Tyr Leu Phe Leu His Gln
195 200 205
Leu His Leu Gly Val Ile Gly Ser Ala Leu Ala Asn Leu Ile Ser Gln
210 215 220
Tyr Thr Leu Ala Leu Leu Leu Phe Leu Tyr Ile Leu Gly Lys Lys Leu
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           275                 280                 285
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       290                 295                 300
Val Tyr Met Val Leu Ala Gly Phe Ser Val Ala Ala Ser Val Arg Val
305                 310                 315                 320
Gly Asn Ala Leu Gly Ala Gly Asp Met Glu Gln Ala Arg Lys Ser Ser
                   325                 330                 335
Thr Val Ser Leu Leu Ile Thr Val Leu Phe Ala Val Ala Phe Ser Val
               340                 345                 350
Leu Leu Leu Ser Cys Lys Asp His Val Gly Tyr Ile Phe Thr Thr Asp
           355                 360                 365
Arg Asp Ile Ile Asn Leu Val Ala Gln Val Val Pro Ile Tyr Ala Val
       370                 375                 380
Ser His Leu Phe Glu Ala Leu Ala Cys Thr Ser Gly Gly Val Leu Arg
385                 390                 395                 400
Gly Ser Gly Asn Gln Lys Val Gly Ala Ile Val Asn Thr Ile Gly Tyr
                   405                 410                 415
Tyr Val Val Gly Leu Pro Ile Gly Ile Ala Leu Met Phe Ala Thr Thr
               420                 425                 430
Leu Gly Val Met Gly Leu Trp Ser Gly Ile Ile Ile Cys Thr Val Phe
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Gln Ala Val Cys Phe Leu Gly Phe Ile Ile Gln Leu Asn Trp Lys Lys
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Ala Cys Gln Gln Ala Gln Val His Ala Asn Leu Lys Val Asn Asn Val
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Pro Arg Ser Gly Asn Ser Ala Leu Pro Gln Asp Pro Leu His Pro Gly
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Cys Pro Glu Asn Leu Glu Gly Ile Leu Thr Asn Asp Val Gly Lys Thr
               500                 505                 510
Gly Glu Pro Gln Ser Asp Gln Gln Met Arg Gln Glu Glu Pro Leu Pro
           515                 520                 525
Glu His Pro Gln Asp Gly Ala Lys Leu Ser Arg Lys Gln Leu Val Leu
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<210> 12264
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<212> DNA
<213> Homo sapiens

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<212> PRT
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Lys Thr Glu Ala Arg Asn Glu Asp Glu Met Tyr Lys Ile Leu Leu Asn
50 55 60
Asp Tyr Glu Tyr Arg Gln Lys Gln Ile Leu Met Glu Asn Ala Glu Leu
65 70 75 80
Lys Lys Val Leu Gln Gln Met Lys Lys Glu Met Ile Ser Leu Leu Ser
85 90 95
Pro Gln Lys Lys Lys Pro Arg Glu Arg Val Asp Asp Ser Thr Gly Thr
100 105 110
Val Ile Ser Asp Val Glu Glu Asp Ala Gly Glu Leu Ser Arg Glu Ser
115 120 125
Met Trp Asp Leu Ser Cys Glu Thr Val Arg Glu Gln Leu Thr Asn Ser
130 135 140
Ile Arg Lys Gln Trp Arg Ile Leu Lys Ser His Val Glu Lys Leu Asp
145 150 155 160
Asn Gln Val Ser Lys Val His Leu Glu Gly Phe Asn Asp Glu Asp Val
165 170 175
Ile Ser Arg Gln Asp His Glu Gln Glu Thr Glu Lys Leu Glu Leu Glu
180 185 190
Ile Gln Gln Cys Lys Glu Met Ile Lys Thr Gln Gln Gln Leu Leu Gln
195 200 205
Gln Gln Leu Ala Thr Ala Tyr Asp Asp Asp Thr Thr Ser Leu Leu Arg
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Asp Cys Tyr Leu Leu Glu Glu Lys Glu Arg Leu Lys Glu Glu Trp Ser
225 230 235 240
Leu Phe Lys Glu Gln Lys Lys Asn Phe Glu Arg Glu Arg Arg Ser Phe
245 250 255
Thr Glu Ala Ala Ile Arg Leu Gly Leu Glu Arg Met Ala Phe Glu Glu
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Glu Arg Ala Ser Trp Leu Lys Gln Gln Phe Leu Asn Met Thr Thr Phe
275 280 285
Asp His Gln Asn Ser Glu Asn Val Lys Leu Phe Ser Ala Phe Ser Gly

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Lys Pro His Ser Val Ser Asn Gly Ser Pro Val Cys Met Ser Lys Leu
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Thr Lys Ser Leu Pro Ala Ser Pro Ser Thr Ser Asp Phe Cys Gln Thr
            340                 345                 350
Arg Ser Cys Ile Ser Glu His Ser Ser Ile Asn Val Leu Asn Ile Thr
        355                 360                 365
Ala Glu Glu Ile Lys Pro Asn Gln Val Gly Gly Glu Cys Thr Asn Gln
    370                 375                 380
Lys Trp Ser Val Ala Ser Arg Pro Gly Ser Gln Glu Gly Cys Tyr Ser
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<212> DNA
<213> Homo sapiens

<220>
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<222> (94)..(1380)

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35 40 45
Glu Thr Gly Ile Gly Lys Ser Thr Leu Met Asp Thr Leu Phe Asn Thr
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Lys Phe Glu Ser Asp Pro Ala Thr His Asn Glu Pro Gly Val Arg Leu
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Leu His Lys Phe Lys Ser Lys Ile Met Ser Glu Leu Val Ser Asn Gly
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Val Gln Ile Tyr Gln Phe Pro Thr Asp Glu Glu Thr Val Ala Glu Ile
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225                 230                 235                 240
Glu Glu Val Lys Ile Gly Asn Lys Met Ala Lys Ala Arg Gln Tyr Pro
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Trp Gly Val Val Gln Val Glu Asn Glu Asn His Cys Asp Phe Val Lys
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Thr His Thr Arg His Tyr Glu Leu Tyr Arg Arg Cys Lys Leu Glu Glu
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Glu Thr Tyr Glu Ala Lys Arg Asn Glu Phe Leu Gly Glu Leu Gln Lys
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            340                 345                 350
Glu Ala Glu Leu Lys Glu Ala Glu Lys Glu Leu His Glu Lys Phe Asp
        355                 360                 365
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385                 390                 395                 400
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<213> Homo sapiens

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Phe	Ser	Tyr	Ser	His	Lys	Leu	Thr	Ile	His	Arg	Arg	Val	His	Thr	Gly
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Glu	Lys	Pro	Tyr	Glu	Cys	Lys	Glu	Cys	Gly	Lys	Ala	Phe	Ser	Val	Ser
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Gly	Gln	Leu	Thr	Gln	His	Leu	Ser	Ile	His	Ser	Gly	Lys	Lys	Pro	Phe
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Glu	Cys	Asn	Lys	Cys	Gly	Lys	Ser	Phe	Arg	Phe	Ile	Ser	Val	Leu	Lys
	210					215					220				
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Ser Tyr Leu Val Arg His Glu Ser Val His Ala Asp Gly Asn Pro Tyr
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Met Cys Glu Glu Cys Gly Lys Ala Phe Asn Ser Ser His Glu Leu Ser
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			20					25					30		
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	50					55					60				
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			100					105					110		
Ile	Lys	Ile	Ala	Ala	Leu	Arg	Met	Tyr	Thr	Ser	Cys	Val	Glu	Lys	Thr
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Asp	Phe	Glu	Glu	Phe	Leu	Leu	Arg	Cys	Gln	Met	Pro	Asp	Thr	Phe	Asn
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Met	Lys	Gln	Glu	Gly	Arg	Ser	Gly	Lys	Tyr	Met	Cys	Arg	Ile	Ile	Val
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245 250 255
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<213> Homo sapiens

<400> 12277
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Glu Cys Arg Asp Arg Glu Glu Arg Asn Glu Lys Lys Ala Gln Ile Gln
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<213> Homo sapiens

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35 40 45
Ala Glu Glu Asp Arg Gln Leu Asn Asn Gln Lys Lys Pro Ala Leu Lys
50 55 60
Lys Leu Thr Leu Leu Pro Ala Val Val Met His Leu Lys Lys Gln Asp
65 70 75 80
Leu Lys Glu Thr Phe Ile Asp Ser Gly Val Met Ser Ala Ile Lys Glu
85 90 95
Trp Leu Ser Pro Leu Pro Asp Arg Ser Leu Pro Ala Leu Lys Ile Arg
100 105 110
Glu Glu Leu Leu Lys Ile Leu Gln Glu Leu Pro Ser Val Ser Gln Glu
115 120 125
Thr Leu Lys His Ser Gly Ile Gly Arg Ala Val Met Tyr Leu Tyr Lys
130 135 140
His Pro Lys Glu Ser Arg Ser Asn Lys Asp Met Ala Gly Lys Leu Ile
145 150 155 160
Asn Glu Trp Ser Arg Pro Ile Phe Gly Leu Thr Ser Asn Tyr Lys Gly
165 170 175
Met Thr Arg Glu Glu Arg Glu Gln Arg Asp Leu Glu Gln Met Pro Gln
180 185 190
Arg Arg Arg Met Asn Ser Thr Gly Gly Gln Thr Pro Arg Arg Asp Leu
195 200 205
Glu Lys Val Leu Thr Gly Glu Glu Lys Ala Leu Arg Pro Gly Asp Pro
210 215 220
Gly Phe Cys Ala Arg Ala Arg Val Pro Met Pro Ser Asn Lys Asp Tyr
225 230 235 240
Val Val Arg Pro Lys Trp Asn Val Glu Met Glu Ser Ser Arg Phe Gln

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<212> DNA
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<222> (148)..(1230)

<400> 12281

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<212> PRT
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<400> 12282
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Pro Asp Val Thr Pro Cys Phe Cys Thr Ile Asn Phe Thr Leu Glu Lys
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Ser Phe Glu Gly Asn Val Phe Met Tyr Tyr Gly Leu Ser Asn Phe Tyr
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Gln Asn His Arg Arg Tyr Val Lys Ser Arg Asp Asp Ser Gln Leu Asn
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Gly Asp Ser Ser Ala Leu Leu Asn Pro Ser Lys Glu Cys Glu Pro Tyr
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Arg Arg Asn Glu Asp Lys Pro Ile Ala Pro Cys Gly Ala Ile Ala Asn
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Asp Lys Asn Val Lys Phe Arg Asn Pro Pro Gly Gly Asp Asn Leu Glu
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Glu Arg Phe Lys Gly Thr Thr Lys Pro Val Asn Trp Leu Lys Pro Val
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Phe Ile Val Trp Met Arg Thr Ala Ala Leu Pro Thr Phe Arg Lys Leu
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Tyr Arg Leu Ile Glu Arg Lys Ser Asp Leu His Pro Thr Leu Pro Ala
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Gly Arg Tyr Ser Leu Asn Val Thr Tyr Asn Tyr Pro Val His Tyr Phe
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Asp Gly Arg Lys Arg Met Ile Leu Ser Thr Ile Ser Trp Met Gly Gly
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Lys Asn Pro Phe Leu Gly Ile Ala Tyr Ile Ala Val Gly Ser Ile Ser
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<212> DNA
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<221> CDS

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Lys	Val	Glu	Phe	Leu	Lys	Gln	Ile	Ala	Asn	Thr	Lys	Gly	Asn	Glu	Asn
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Ala	Asn	Gly	Ala	Pro	Ala	Ile	Thr	Leu	Leu	Ile	Arg	Glu	Lys	Asn	Glu
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Asp Leu Thr Asn Lys Glu Gly Lys Lys Pro Glu Glu Lys Thr Tyr Ala
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Val Leu Thr Ser Val Lys Lys Lys Val Lys Asn Val Gly Ile Phe Leu
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Lys Asn Glu Asp Glu Glu Glu Glu Glu Glu Glu Lys Asp Glu Ala Glu
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Gln Lys Arg Met Gln Gly Ser Leu Glu Ala His Val Asn Gly Phe Arg
675 680 685
Phe Thr Ser Val Arg Gly Asp Lys Val Asp Ile Leu Tyr Asn Asn Ile
690 695 700
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Asp Val Gln Phe Tyr Thr Glu Val Gly Glu Ile Thr Thr Asp Leu Gly
740 745 750
Lys His Gln His Met His Asp Arg Asp Asp Leu Tyr Ala Glu Gln Met
755 760 765
Glu Arg Glu Met Arg His Lys Leu Lys Thr Ala Phe Lys Asn Phe Ile
770 775 780
Glu Lys Val Glu Ala Leu Thr Lys Glu Glu Leu Glu Phe Glu Val Pro
785 790 795 800
Phe Arg Asp Leu Gly Phe Asn Gly Ala Pro Tyr Arg Ser Thr Cys Leu
805 810 815
Leu Gln Pro Thr Ser Ser Ala Leu Val Asn Ala Thr Glu Trp Pro Pro
820 825 830
Phe Val Val Thr Leu Asp Glu Val Glu Leu Ile His Phe Glu Arg Val
835 840 845
Gln Phe His Leu Lys Asn Phe Asp Met Val Ile Val Tyr Lys Asp Tyr
850 855 860
Ser Lys Lys Val Thr Met Ile Asn Ala Ile Pro Val Ala Ser Leu Asp
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885 890 895
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915 920 925
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930 935 940
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945 950 955 960
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965 970 975
Lys Glu Ser Leu Gly Ser Glu Glu Glu Ser Gly Lys Asp Trp Asp Glu
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Leu Glu Glu Glu Ala Arg Lys Ala Asp Arg Glu Ser Arg Tyr Glu Glu
995 1000 1005
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Val Ser Pro Gln Ala Ala Ala Leu Asn Asn Asp Ser Ser Gln Asn Val
50 55 60
Leu Ser Leu Phe Asn Gly Tyr Val Tyr Ser Gly Val Glu Thr Leu Gly
65 70 75 80
Lys Glu Leu Phe Met Tyr Phe Gly Pro Lys Ala Leu Arg Ile His Phe
85 90 95
Gly Met Lys Gly Phe Ile Met Ile Asn Pro Leu Glu Tyr Lys Tyr Lys
100 105 110
Asn Gly Ala Ser Pro Val Leu Glu Val Gln Leu Thr Lys Asp Leu Ile
115 120 125
Cys Phe Phe Asp Ser Ser Val Glu Leu Arg Asn Ser Met Glu Ser Gln
130 135 140
Gln Arg Ile Arg Met Met Lys Glu Leu Asp Val Cys Ser Pro Glu Phe
145 150 155 160
Ser Phe Leu Arg Ala Glu Ser Glu Val Lys Lys Gln Lys Gly Arg Met
165 170 175
Leu Gly Asp Val Leu Met Asp Gln Asn Val Leu Pro Gly Val Gly Asn
180 185 190
Ile Ile Lys Asn Glu Ala Leu Phe Asp Ser Gly Leu His Pro Ala Val
195 200 205
Lys Val Cys Gln Leu Thr Asp Glu Gln Ile His His Leu Met Lys Met
210 215 220
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Cys Asp Ala Cys Leu Thr Ser Arg Pro Ile Asp Ser Val Leu Lys Ser
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Glu Glu Asn Ser Thr Val Phe Ser His Leu Met Lys Tyr Pro Cys Asn
        355                 360                 365
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    370                 375                 380
Phe Gly Thr Thr Thr Leu Val Leu Thr Asp Phe Ser Asn Lys Ser Ser
385                 390                 395                 400
Thr Leu Glu Arg Lys Thr Lys Gln Asn Gln Ile Leu Asp Glu Glu Phe
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Gln Asn Ser Pro Pro Ala Ser Val Cys Leu Asn Asp Ile Gln His Pro
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Ser Lys Lys Thr Thr Asn Asp Ile Thr Gln Leu Ser Ser Lys Val Asn
        435                 440                 445
Ile Ser Pro Thr Ile Ser Ser Glu Ser Lys Leu Phe Ser Pro Ala His
    450                 455                 460
Lys Lys Pro Lys Thr Ala His Tyr Ser Ser Pro Glu Leu Lys Ser Cys
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Pro Arg Thr Leu Asn Pro Asp Ser Pro Arg Cys Ser Lys His Asn Arg
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Gln Phe Tyr Ala Cys Pro Leu Pro Arg Glu Ala Gln Cys Gly Phe Phe
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Glu Trp Ala Asp Leu Ser Phe Pro Phe Cys Asn His Gly Lys Arg Ser
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<213> Homo sapiens

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<400> 12288

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Cys	Leu	Val	Arg	Met	Cys	Ser	Lys	Glu	Arg	Leu	Leu	Glu	Glu	Arg	Val
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Glu	Gly	Ala	Glu	Thr	Leu	Ala	Tyr	Leu	Ile	Glu	Pro	Asp	Val	Glu	Leu
			260					265					270		
Gln	Arg	Ile	Ala	Ser	Ile	Thr	Asp	His	Leu	Ile	Ala	Val	Leu	Ala	Asp
		275					280					285			
Tyr	Phe	Lys	Tyr	Pro	Ser	Ser	Val	Ser	Ala	Ile	Thr	Asp	Ile	Lys	Arg

0056-0056-0056-0056

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    290                 295                 300
Leu Asp His Asp Leu Lys His Ala His Glu Leu Arg Gln Ala Ala Phe
305                 310                 315                 320
Lys Leu Tyr Ala Ser Leu Gly Ala Asn Asp Glu Asp Ile Arg Lys Lys
                325                 330                 335
Ile Ile Glu Thr Glu Asn Met Met Asp Arg Ile Val Thr Gly Leu Ser
            340                 345                 350
Glu Ser Ser Val Lys Val Arg Leu Ala Ala Val Arg Cys Leu His Ser
        355                 360                 365
Leu Ser Arg Ser Val Gln Gln Leu Arg Thr Ser Phe Gln Asp His Ala
    370                 375                 380
Val Trp Lys Pro Leu Met Lys Val Leu Gln Asn Ala Pro Asp Glu Ile
385                 390                 395                 400
Leu Val Val Ala Ser Ser Met Leu Cys Asn Leu Leu Leu Glu Phe Ser
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Pro Ser Lys Glu Pro Ile Leu Glu Ser Gly Ala Val Glu Leu Leu Cys
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Gly Leu Thr Gln Ser Glu Asn Pro Val Tyr Glu
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<212> DNA
<213> Homo sapiens

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<222> (12)..(1289)

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cagggatcca ccggaatctt ggcacccacc tttcccgagt ccgatctctg gacctggatg 720
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<210> 12290
<211> 426
<212> PRT
<213> Homo sapiens

<400> 12290

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             20                  25                  30
Arg Pro Asp Gly Met His Gln Arg Ser Tyr Ser Val Ser Ser Ala Asp
         35                  40                  45
Gln Trp Ser Glu Ala Thr Val Ile Ala Asn Ser Ala Ile Ser Ser Asp
     50                  55                  60
Thr Gly Leu Gly Asp Ser Val Cys Ser Ser Pro Ser Ile Ser Ser Thr
 65                  70                  75                  80
Thr Ser Pro Lys Leu Asp Pro Pro Pro Ser Pro His Ala Asn Arg Lys
                 85                  90                  95
Lys His Arg Arg Lys Lys Ser Thr Ser Asn Phe Lys Ala Asp Gly Leu
            100                 105                 110
Ser Gly Thr Ala Glu Glu Gln Glu Glu Asn Phe Glu Phe Ile Ile Val
        115                 120                 125
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Ser Leu Thr Gly Gln Thr Trp His Phe Glu Ala Thr Thr Tyr Glu Glu
    130                 135                 140
Arg Asp Ala Trp Val Gln Ala Ile Glu Ser Gln Ile Leu Ala Ser Leu
145                 150                 155                 160
Gln Ser Cys Glu Ser Ser Lys Asn Lys Ser Arg Leu Thr Ser Gln Ser
                165                 170                 175
Glu Ala Met Ala Leu Gln Ser Ile Arg Asn Met Arg Gly Asn Ser His
            180                 185                 190
Cys Val Asp Cys Glu Thr Gln Asn Pro Asn Trp Ala Ser Leu Asn Leu
        195                 200                 205
Gly Ala Leu Met Cys Ile Glu Cys Ser Gly Ile His Arg Asn Leu Gly
    210                 215                 220
Thr His Leu Ser Arg Val Arg Ser Leu Asp Leu Asp Asp Trp Pro Ile
225                 230                 235                 240
Glu Leu Ile Lys Val Met Ser Ser Ile Gly Asn Glu Leu Ala Asn Ser
                245                 250                 255
Val Trp Glu Glu Ser Ser Gln Gly Arg Thr Lys Pro Ser Val Asp Ser
            260                 265                 270
Thr Arg Glu Glu Lys Glu Arg Trp Ile Arg Ala Lys Tyr Glu Gln Lys
        275                 280                 285
Leu Phe Leu Ala Pro Leu Pro Cys Thr Glu Leu Ser Leu Gly Gln His
    290                 295                 300
Leu Leu Arg Ala Thr Ala Asp Glu Asp Leu Arg Thr Ala Ile Leu Leu
305                 310                 315                 320
Leu Ala His Gly Ser Arg Asp Glu Val Asn Glu Thr Cys Gly Glu Gly
                325                 330                 335
Asp Gly Arg Thr Ala Leu His Leu Ala Cys Arg Lys Gly Asn Val Val
            340                 345                 350
Leu Ala Gln Leu Leu Ile Trp Tyr Gly Val Asp Val Thr Ala Arg Asp
        355                 360                 365
Ala His Gly Asn Thr Ala Leu Ala Tyr Ala Arg Gln Ala Ser Ser Gln
    370                 375                 380
Glu Cys Ile Asp Val Leu Leu Gln Tyr Gly Cys Pro Asp Glu Arg Phe
385                 390                 395                 400
Val Leu Met Ala Thr Pro Asn Leu Ser Arg Arg Asn Asn Asn Arg Asn
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Asn Ser Ser Gly Arg Val Pro Thr Ile Ile
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<210> 12291
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<212> DNA
<213> Homo sapiens

<220>
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<222> (154)..(879)

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ctctctcgga agccggatcc cgagccgggc aggatggatc accaccagcc ggggactggg 180
cgctaccagg tgcttcttaa tgaagaggat aactcagaat catcggctat agagcagcca 240
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<210> 12292
<211> 242
<212> PRT

<213> Homo sapiens

<400> 12292

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Asn Pro Ala Pro Gln Ile Val Gln Ala Ala Ser Ser Ala Pro Ala Leu
         35                  40                  45
Glu Thr Asp Ser Ser Pro Pro Pro Tyr Ser Ser Ile Thr Val Glu Val
     50                  55                  60
Pro Thr Thr Ser Asp Thr Glu Val Tyr Gly Glu Phe Tyr Pro Val Pro
 65                  70                  75                  80
Pro Pro Tyr Ser Val Ala Thr Ser Leu Pro Thr Tyr Asp Glu Ala Glu
                 85                  90                  95
Lys Ala Lys Ala Ala Ala Met Ala Ala Ala Ala Ala Glu Thr Ser Gln
            100                 105                 110
Arg Ile Gln Glu Glu Glu Cys Pro Pro Arg Asp Asp Phe Ser Asp Ala
        115                 120                 125
Asp Gln Leu Arg Val Gly Asn Asp Gly Ile Phe Met Leu Ala Phe Phe
    130                 135                 140
Met Ala Phe Ile Phe Asn Trp Leu Gly Phe Cys Leu Ser Phe Cys Ile
145                 150                 155                 160
Thr Asn Thr Ile Ala Gly Arg Tyr Gly Ala Ile Cys Gly Phe Gly Leu
                165                 170                 175
Ser Leu Ile Lys Trp Ile Leu Ile Val Arg Phe Ser Asp Tyr Phe Thr
            180                 185                 190
Gly Tyr Phe Asn Gly Gln Tyr Trp Leu Trp Trp Ile Phe Leu Val Leu
        195                 200                 205
Gly Leu Leu Leu Phe Phe Arg Gly Phe Val Asn Tyr Leu Lys Val Arg
    210                 215                 220
Asn Met Ser Glu Ser Met Ala Ala Ala His Arg Thr Arg Tyr Phe Phe
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<210> 12293
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (79)..(2700)

<400> 12293

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<210> 12294
<211> 874
<212> PRT
<213> Homo sapiens

<400> 12294

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            20                  25                  30
Val Phe Asn Glu Thr Pro Ile Asn Pro Arg Lys Cys Ala His Ile Leu
        35                  40                  45
Thr Lys Ile Leu Tyr Leu Ile Asn Gln Gly Glu His Leu Gly Thr Thr
    50                  55                  60
Glu Ala Thr Glu Ala Phe Phe Ala Met Thr Lys Leu Phe Gln Ser Asn
65                  70                  75                  80
Asp Pro Thr Leu Arg Arg Met Cys Tyr Leu Thr Ile Lys Glu Met Ser
                85                  90                  95
Cys Ile Ala Glu Asp Val Ile Ile Val Thr Ser Ser Leu Thr Lys Asp
            100                 105                 110
Met Thr Gly Lys Glu Asp Asn Tyr Arg Gly Pro Ala Val Arg Ala Leu
        115                 120                 125
Cys Gln Ile Thr Asp Ser Thr Met Leu Gln Ala Ile Glu Arg Tyr Met
    130                 135                 140
Lys Gln Ala Ile Val Asp Lys Val Pro Ser Val Ser Ser Ser Ala Leu
145                 150                 155                 160
Val Ser Ser Leu His Leu Leu Lys Cys Ser Phe Asp Val Val Lys Arg
                165                 170                 175
Trp Val Asn Glu Ala Gln Glu Ala Ala Ser Ser Asp Asn Ile Met Val
            180                 185                 190
Gln Tyr His Ala Leu Gly Leu Leu Tyr His Val Arg Lys Asn Asp Arg
        195                 200                 205
Leu Ala Val Asn Lys Met Ile Ser Lys Val Thr Arg His Gly Leu Lys
    210                 215                 220
Ser Pro Phe Ala Tyr Cys Met Met Ile Arg Val Ala Ser Lys Gln Leu
225                 230                 235                 240
Glu Glu Glu Asp Gly Ser Arg Asp Ser Pro Leu Phe Asp Phe Ile Glu
                245                 250                 255
Ser Cys Leu Arg Asn Lys His Glu Met Val Val Tyr Glu Ala Ala Ser
            260                 265                 270
Ala Ile Val Asn Leu Pro Gly Cys Ser Ala Lys Glu Leu Ala Pro Ala
        275                 280                 285
Val Ser Val Leu Gln Leu Phe Cys Ser Ser Pro Lys Ala Ala Leu Arg
    290                 295                 300
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0050205.0004000

Tyr Ala Ala Val Arg Thr Leu Asn Lys Val Ala Met Lys His Pro Ser
305 310 315 320
Ala Val Thr Ala Cys Asn Leu Asp Leu Glu Asn Leu Val Thr Asp Ser
325 330 335
Asn Arg Ser Ile Ala Thr Leu Ala Ile Thr Thr Leu Leu Lys Thr Gly
340 345 350
Ser Glu Ser Ser Ile Asp Arg Leu Met Lys Gln Ile Ser Ser Phe Met
355 360 365
Ser Glu Ile Ser Asp Glu Phe Lys Val Val Val Val Gln Ala Ile Ser
370 375 380
Ala Leu Cys Gln Lys Tyr Pro Arg Lys His Ala Val Leu Met Asn Phe
385 390 395 400
Leu Phe Thr Met Leu Arg Glu Glu Gly Gly Phe Glu Tyr Lys Arg Ala
405 410 415
Ile Val Asp Cys Ile Ile Ser Ile Ile Glu Glu Asn Ser Glu Ser Lys
420 425 430
Glu Thr Gly Leu Ser His Leu Cys Glu Phe Ile Glu Asp Cys Glu Phe
435 440 445
Thr Val Leu Ala Thr Arg Ile Leu His Leu Leu Gly Gln Glu Gly Pro
450 455 460
Lys Thr Thr Asn Pro Ser Lys Tyr Ile Arg Phe Ile Tyr Asn Arg Val
465 470 475 480
Val Leu Glu His Glu Glu Val Arg Ala Gly Ala Val Ser Ala Leu Ala
485 490 495
Lys Phe Gly Ala Gln Asn Glu Glu Met Leu Pro Ser Ile Leu Val Leu
500 505 510
Leu Lys Arg Cys Val Met Asp Asp Asp Asn Glu Val Arg Asp Arg Ala
515 520 525
Thr Phe Tyr Leu Asn Val Leu Glu Gln Lys Gln Lys Ala Leu Asn Ala
530 535 540
Gly Tyr Ile Leu Asn Gly Leu Thr Val Ser Ile Pro Gly Leu Glu Arg
545 550 555 560
Ala Leu Gln Gln Tyr Thr Leu Glu Pro Ser Glu Lys Pro Phe Asp Leu
565 570 575
Lys Ser Val Pro Leu Ala Thr Ala Pro Met Ala Glu Gln Arg Thr Glu
580 585 590
Ser Thr Pro Ile Thr Ala Val Lys Gln Pro Glu Lys Val Ala Ala Thr
595 600 605
Arg Gln Glu Ile Phe Gln Glu Gln Leu Ala Ala Val Pro Val Phe Arg
610 615 620
Gly Leu Gly Pro Leu Phe Lys Ser Ser Pro Glu Pro Val Ala Leu Thr
625 630 635 640
Glu Ser Glu Thr Glu Tyr Val Ile Arg Cys Thr Lys His Thr Phe Thr
645 650 655
Asn His Met Val Phe Gln Phe Asp Cys Thr Asn Thr Leu Asn Asp Gln
660 665 670
Thr Leu Glu Asn Val Thr Val Gln Met Glu Pro Thr Glu Ala Tyr Glu
675 680 685

0050050 .0050050

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Val Leu Cys Tyr Val Pro Ala Arg Ser Leu Pro Tyr Asn Gln Pro Gly
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Thr Cys Tyr Thr Leu Val Ala Leu Pro Lys Glu Asp Pro Thr Ala Val
705                 710                 715                 720
Ala Cys Thr Phe Ser Cys Met Met Lys Phe Thr Val Lys Asp Cys Asp
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Pro Thr Thr Gly Glu Thr Asp Asp Glu Gly Tyr Glu Asp Glu Tyr Val
            740                 745                 750
Leu Glu Asp Leu Glu Val Thr Val Ala Asp His Ile Gln Lys Val Met
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Lys Leu Asn Phe Glu Ala Ala Trp Asp Glu Val Gly Asp Glu Phe Glu
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Val Gly Asn Ile Val Lys Phe Leu Gly Met His Pro Cys Glu Arg Ser
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Asp Lys Val Pro Asp Asn Lys Asn Thr His Thr Leu Leu Leu Ala Gly
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Val Phe Arg Gly Gly His Asp Ile Leu Met Arg Ser Arg Leu Leu Leu
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<222> (344)..(1945)

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165 170 175
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195 200 205
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210 215 220
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<400> 12298

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His	Leu	Leu	Gln	Asp	Leu	Ala	Asn	Lys	Ile	Thr	Glu	Leu	Tyr	Lys	Gln
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Glu	Ile	Leu	Asp	Val	Ile	Val	Arg	Ser	Phe	Ala	Pro	Ile	Leu	Pro	His
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35 40 45
Asn Leu Leu Ser Tyr Lys Tyr Leu Lys Lys Gln Ser Arg Glu Leu Lys
50 55 60
Pro Val Gly Val Met Ala Pro Ala Ser Gly Pro Ala Ser Thr Asp Ala
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Glu Gly Arg Ser Ser Thr Gln Thr Leu Glu Asp Ser Trp Arg Tyr Glu
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Leu Asn Arg Ser Asp Ser Asp Ser Ser Thr Leu Ser Lys Lys Pro Pro
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Phe Val Arg Asn Ser Leu Glu Arg Arg Ser Val Arg Met Lys Arg Pro
225                 230                 235                 240
Ser Ser Val Lys Ser Leu Arg Ser Glu Arg Leu Ile Arg Thr Ser Leu
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Arg Thr Leu Thr Val Leu Gly Ala Gln Pro Asp Leu Leu Ser Tyr Glu
    210                 215                 220
Asp Leu Glu Leu Ala Val Gly His Leu Tyr Arg Leu Ser Phe Leu Lys
225                 230                 235                 240
Glu Asp Ser Gln Ser Cys Arg Val Ala Ala Leu Glu Ala Ser Gly Thr
                245                 250                 255
Leu Ala Ala Leu Tyr Pro Val Ala Phe Ser Ser His Leu Val Pro Lys
            260                 265                 270
Leu Ala Glu Glu Leu Arg Val Gly Glu Ser Asn Leu Thr Asn Gly Asp
        275                 280                 285
Glu Pro Thr Gln Cys Ser Arg His Leu Cys Cys Leu Gln Ala Leu Ser
    290                 295                 300
Ala Val Ser Thr His Pro Ser Ile Val Lys Glu Thr Leu Pro Leu Leu
305                 310                 315                 320
Leu Gln His Leu Trp Gln Val Asn Arg Gly Asn Met Val Ala Gln Ser
                325                 330                 335
Ser Asp Val Ile Ala Val Cys Gln Ser Leu Arg Gln Met Ala Glu Lys
            340                 345                 350
Cys Gln Gln Asp Pro Glu Ser Cys Trp Tyr Phe His Gln Thr Ala Ile
        355                 360                 365
Pro Cys Leu Leu Ala Leu Ala Val Gln Ala Ser Met Pro Glu Lys Gly
    370                 375                 380
Pro Ser Val Leu Arg Lys Val Leu Leu Glu Asp Glu Val Leu Ala Ala
385                 390                 395                 400
Met Val Ser Val Ile Gly Thr Ala Thr Thr His Leu Ser Pro Glu Leu
                405                 410                 415
Ala Ala Gln Ser Val Thr His Ile Val Pro Leu Phe Leu Asp Gly Asn
            420                 425                 430
Val Ser Phe Leu Pro Glu Asn Ser Phe Pro Ser Arg Phe Gln Pro Phe
        435                 440                 445
Gln Asp Gly Ser Ser Gly Gln Arg Arg Leu Ile Ala Leu Leu Met Ala
    450                 455                 460
Phe Val Cys Ser Leu Pro Arg Asn Val Glu Ile Pro Gln Leu Asn Gln
465                 470                 475                 480
Leu Met Arg Glu Leu Leu Glu Leu Ser Cys Cys His Ser Cys Pro Phe
                485                 490                 495
Ser Ser Thr Ala Ala Ala Lys Cys Phe Ala Gly Leu Leu Asn Lys His
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